

#### **BIDDING ADDENDUM**

Addendum No. 2 for 280-22 OWASA Administration Building Monumental Stair.

Wiley Wilson Comm. No. 230230.00

Addendum Date: October 1, 2024

To: All Bidding Document Holders of Record

From: Wiley|Wilson

Raleigh, NC

This Addendum contains **6** pages and listed attachments and forms as part of the bidding documents and modifies the Project Manual and Drawings dated, September 11, 2024, as noted below. Acknowledge receipt of this Addendum in attached Addendum Acknowledgement Form. Failure to do so may subject bidder to disqualification.

#### **SPECIFICATIONS**

- 1. Add attached Section 033000 Cast-In-Place Concrete to the project manual.
- 2. Attached Section 055113 is revised to include pre-filled metal pan treads.
- 3. Attached Proposal Lump Sum Bid Form is revised to include Bid Alternates for a carpet border in the reception area per Drawing A-101 and a tile border on the lower-level per Drawing A-401 Keynote 10. The carpet border surrounding the stair opening per A-401 Keynote 9 must be included in the Base Bid. Bidders are required to provide a price for Bid Alternates 1 and 2. Bid Alternates 1 and 2 will not be used to evaluate the apparent low bidder.

#### **DRAWINGS**

- 1. Revise AD103 General Demolition Note 3 to require completion of all demolition activities between 7:00PM and 7:00AM.
- 2. Revise AD101 Keynote 7 to remove reference to sound control.
- 3. Revise AD101 to delete General Note 16 related to engineering survey.
- 4. Add Drawing S-002 for concrete special inspections.

# ANSWERS TO REQUESTS FOR INFORMATION

- 1. **Question:** Please clarify smoke detector locations and required protections during construction.
  - a. **Answer:** All fire alarm devices are existing to remain. Contractor to protect fire alarm devices within and immediately adjacent to the project boundaries from dust and accidental trip.



- 2. **Question:** Who is responsible for removing atrium level furniture and art, garden plants, and wall plaque on elevator wall before construction?
  - a. **Answer:** Owner is responsible for removing all mentioned items and returning to desired locations post construction. Contractor must remove rock garden decorative rock and reuse to infill new rock garden.
- 3. **Question:** Are there attachments from the stair into the elevator shaft?
  - a. **Answer:** No attachments are anticipated. Contract documents call for repair of the plaster surface of the elevator shaft.
- 4. **Question:** Please provide a spec to match lower-level tile to support base bid. For Bid Alternate Lower-Level Tile Border, please provide drawings and specs for pricing.
  - a. **Answer:** The base bid must include replacing all demolished tile or tile otherwise damaged by Contractor to match the existing tile. Contractor is responsible for selecting submitting matching tile samples to OWASA for approval.

Additionally, Contractor must provide a bid alternate for a new tile border. Refer to the attached revised Drawing A-401 Keynote 10 and attached revised Proposal – Lump Sum bid form.

- 5. **Question:** What permits are planned to be pulled?
  - a. **Answer:** OWASA will not require permits to be obtained for this project.
- 6. **Question:** Please provide direction how to infill carpet at the existing stair connection.
  - a. **Answer:** Contractor must provide new carpet border per attached revised Drawing A-401 Keynote 9 around stair opening.

Additionally Contractor must provide a bid additive alternate price for a matching carpet border in the reception area as shown on revised Drawing A-401.

- 7. **Question:** Who will complete special inspections?
  - a. Answer:
    - **i.** Special inspections will be provided by the Owner.
- 8. **Question:** Can Lower-Level Temporary Construction Life Safety Plan be adjusted to close off the IT Entry, keep access to the Machine Room, and to the HR entry? Contractor notes provided temporary barrier limits do not provide enough space to complete demo and construction activities.
  - **a. Answer:** Refer to attached revised Drawing AD101.
- 9. **Question:** There seems to be no direction in the documents for temporary egress signage during construction. Please clarify if this is an Owner responsibility or a Contractor responsibility. If this is a Contractor responsibility, please provide plans and specifications for this temporary egress signage.
  - a. **Answer:** OWASA will provide temporary egress signage.



- 10. **Question:** The documents mention "sound control" as part of the temporary protection system, but there does not appear to be a sound control standard to price and construct the temporary protection system. Please provide a sound control standard in this instance.
  - a. **Answer:** Sound control is not required.
- 11. **Question:** What Air Quality Testing does OWASA require?
  - **a. Answer:** Air Quality Testing is not required.
- 12. **Question:** Can original building and HVAC Airflow record documents be issued to contractors?
  - a. Answer: OWASA Operations Center (1990) and OWASA Administration Building HVAC Replacement Record Drawings are available. Submit a Sensitive Information Application to OWASA's Project Manager (Darren Berger, <a href="mailto:dberger@owasa.com">dberger@owasa.com</a>) to request access.
- 13. **Question:** Sheet AD101, note 16 references that the Contractor is to perform and engineering study regarding the structural integrity of the current structure relative to the stair system demolition. This seems odd, since the EOR should be responsible for this study and the resulting analysis that would inform the bid documents governing the demolition of the stair. Please clarify the responsibilities of the Contractor.
  - a. **Answer:** Delete AD101 Note 16. An engineering survey is not required.
- 14. **Question:** Do the project Bid Documents contain a Concrete Specification? If so, please send a copy to bidders. Noting the only "Concrete Spec" we see is Note "C" on S-001.
  - **a. Answer:** Refer to attached Specification 033000 Cast-In-Place Concrete.
- 15. **Question:** Note "C" on S-001 does not spec aggregate size
  - a. **Answer:** Refer to attached Specification 033000 Cast-In-Place Concrete.
- 16. **Question:** Can designer provide a desired mix design for footing / slabs?
  - **b. Answer:** The contract documents provide performance requirements and limits in note C.2 on S-001 and Specification 033000 Cast-In-Place Concrete. The mix design is the responsibility of the Contractor and must be submitted to the SEOR for approval.
- 17. **Question:** Can designer provide "Pea Gravel" mix design for Stair pan fill and curbs?
  - **c. Answer:** The contract documents provide performance requirements and limits in note C.2 on S-001 and Specification 033000 Cast-In-Place Concrete. The mix design is the responsibility of the Contractor and must be submitted to the SEOR for approval.
- 18. **Question:** Can pan stairs be filled with bag mixed on-site concrete?
  - **d. Answer:** No, pan stairs must be pre-filled in accordance with Section 055113.



- 19. **Question:** Please provide a small line pump mix design for Slab On Grade concrete.
  - **e. Answer:** The contract documents provide performance requirements and limits in note C.2 on S-001 and Specification 033000 Cast-In-Place Concrete. The mix design is the responsibility of the Contractor and must be submitted to the SEOR for approval.
- 20. **Question:** Please provide clarity on pan stair fill element. Stair Pans Spec Section 055113 item 1.3.A.1 Calls out Pre-Filled Metal Pan Treads. Note 1 on A-401 calls out "Grout Filled". All Detail Notes on S-301 call out "Concrete Filled".
  - **f. Answer:** Pan stairs must be pre-filled in accordance with Section 055113. The contract documents provide performance requirements and limits in note C.2 on S-001 and Specification 033000 Cast-In-Place Concrete. The mix design is the responsibility of the Contractor and must be submitted to the SEOR for approval.
- 21. **Question:** Request clear limits of slab replacement as comparison between demolition to structural, to architectural drawings do not concur.
  - **a. Answer:** Do not scale drawings. Refer to structural drawings for dimensions. Architectural drawings do not provide dimensions for this reason.
- 22. **Question: For** Curb Detail 4/S-301 Is a water stop required at floor to curb connection? **g. Answer:** No
- 23. **Question:** There doesn't seem to be a specification section for the Roppe rubber stair treads and nosings that are called out as "tbd" on details 2/A-501, 3/A-501, 4/A-501, and 6/A-501. Please clarify the acceptable stair tread and nosing product "families" for pricing or provide a standardized allowance for this material and installation for a future specification. Please confirm this detail. The rubber safety nosing appears in conflict with the stair tread applied surface.
  - **a. Answer:** Provide Roppe "Marbelized Color Palette". Provide samples for OWASA selection.
- 24. **Question:** Please confirm rail design. Design currently requires 1-3/4" plate. A standard plate is 2" and will save cost if allowed to use 2".
  - a. **Answer:** A 2" plate is acceptable. Refer to attached revised Drawing A-501.
- 25. **Question:** There doesn't seem to be a Division 6 hardwood cap and hardwood handrail specification section nor any detail within details 1/A401 and 3/A401 on sheet A-501 (wood species, shape, attachment method, etc.). Please provide this information.
  - **a. Answer:** Provide "Red Oak" and clear stain. Refer to attached revised Drawing A-501.



- **26. Question:** Can Detail 1 on A-401 be adjusted to show railing attachment to beam under deck? It currently shows attachment directly to deck.
  - **a. Answer:** No. As-built drawings indicate a structural steel bent plate rather than light gage pour stop at the edge of deck. The railing does not completely align with the beam flange below and spacing may interfere with joist seats. See detail on S-501 for additional information.
- **27. Question:** Please confirm if outlets at plenum façade near existing reception furniture are to remain, or be moved. Current location presents clash with new stringer locate.
  - **a. Answer:** Devices in conflict are to be abandoned in place. Disconnect conductors and remove back to next upstream device. Provide flush covers.
- **28. Question:** Could you please forward the bid bond form?
  - **a. Answer:** OWASA does not require a specific format.
- 29. **Question:** Are all subcontractor's and suppliers required to be submitted with our bid? Or only certain trades?
  - **a. Answer:** The Certified List of Equipment/Material Manufacturers and Subcontractors form should include all subcontractors and suppliers that will be used in the performance of Work to be completed on this project.
- 30. **Question:** Should the \$50,000 contingency allowance include contractor's overhead and profit or is it exclusive of any markups?
  - **a. Answer:** No, the contingency allowance is for the sole use of OWASA.
- 31. **Question:** Should the total lump sum single prime base bid price on the bid form include the \$50,000 contingency allowance?
  - **a. Answer:** Yes, the total bid price must include the \$50,000 allowance.
- 32. **Question:** Is the Article 9 form "Contractor's Experience" required to be submitted with the bid or will that be requested after the bid opening?
  - **a. Answer:** Submit Contractor's Experience with the bid.
- 33. **Question:** Who is responsible for builder's risk insurance?
  - **a. Answer:** The Contractor.
- 34. **Question:** Who is responsible for permit fees?
  - **a. Answer:** The Contractor, if applicable.
- 35. **Question:** Does this project require any prevailing wages or wage rate requirements such as Davis-Bacon?
  - a. Answer: No.



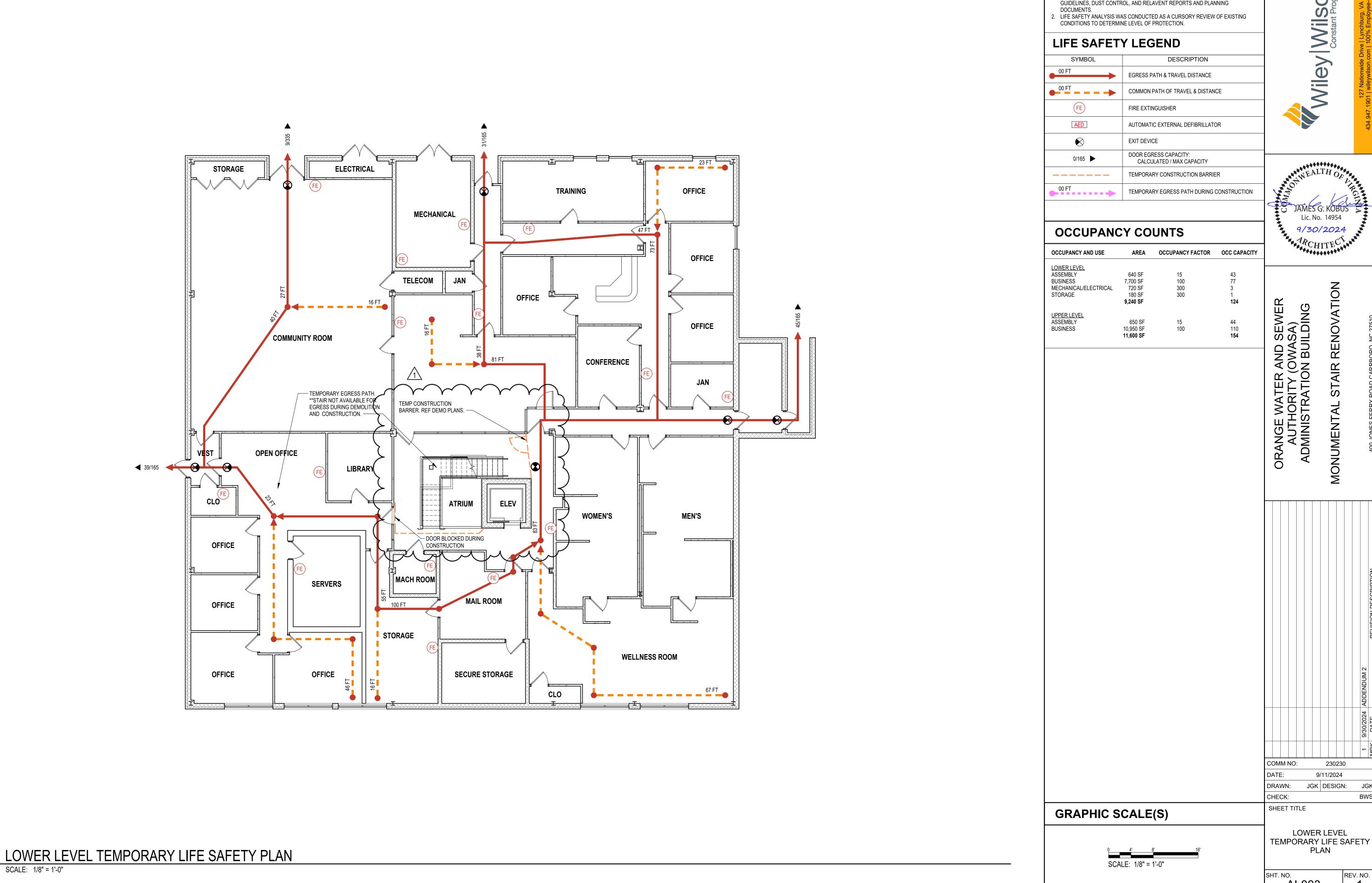
# **ATTACHMENTS**

- 1. Drawings AL-003, AD-101, A-101, A-401, A-501, S-002
- 2. Specification 033000
- 3. Specification 055113
- 4. Proposal Lump Sum Bid Form
- 5. Sensitive Information Application
- 6. Addendum Acknowledgement Form.

# End of Addendum No. 2

WILF,Y|WILSON

Aaron Tice PE Vice President

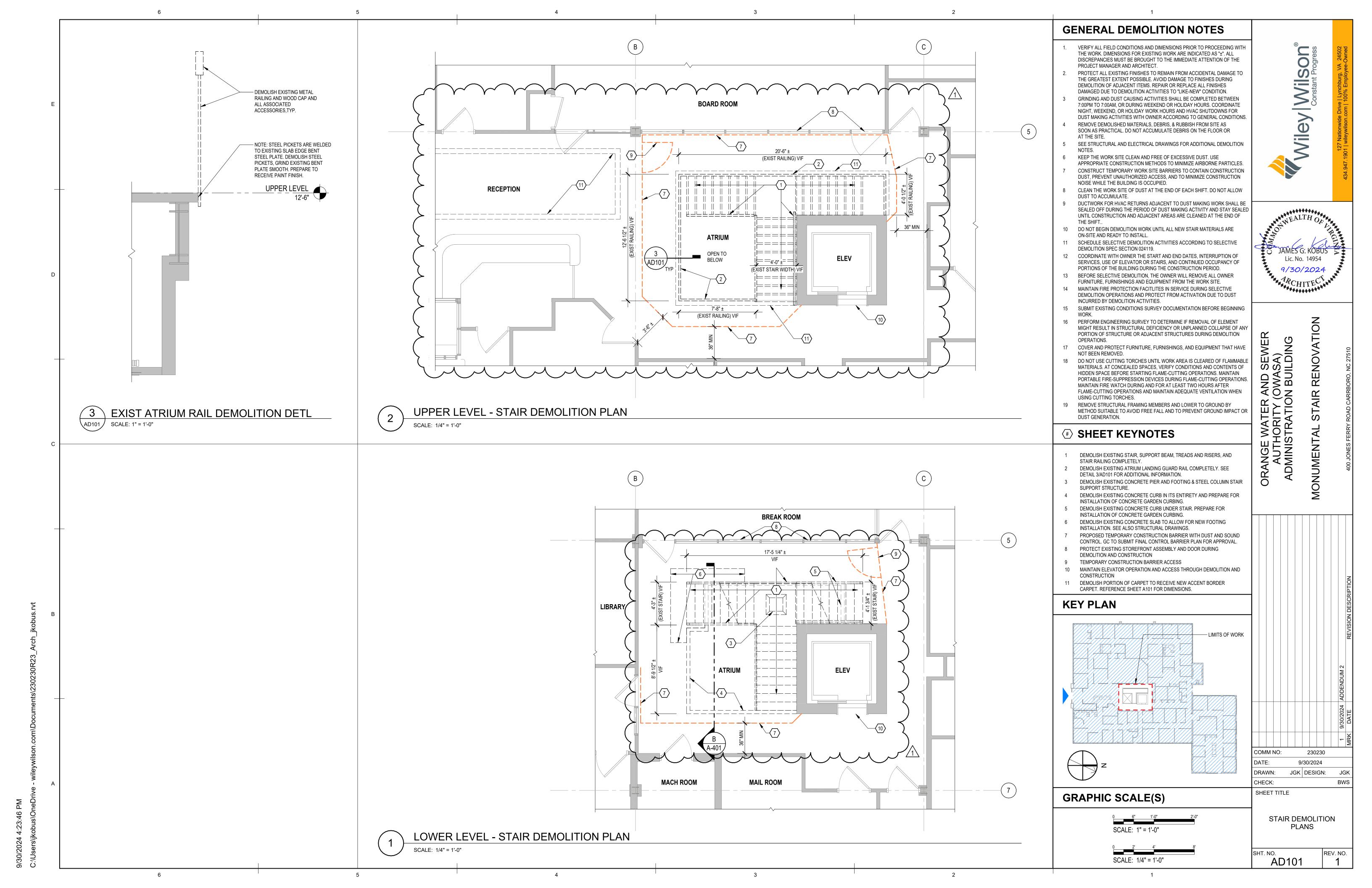


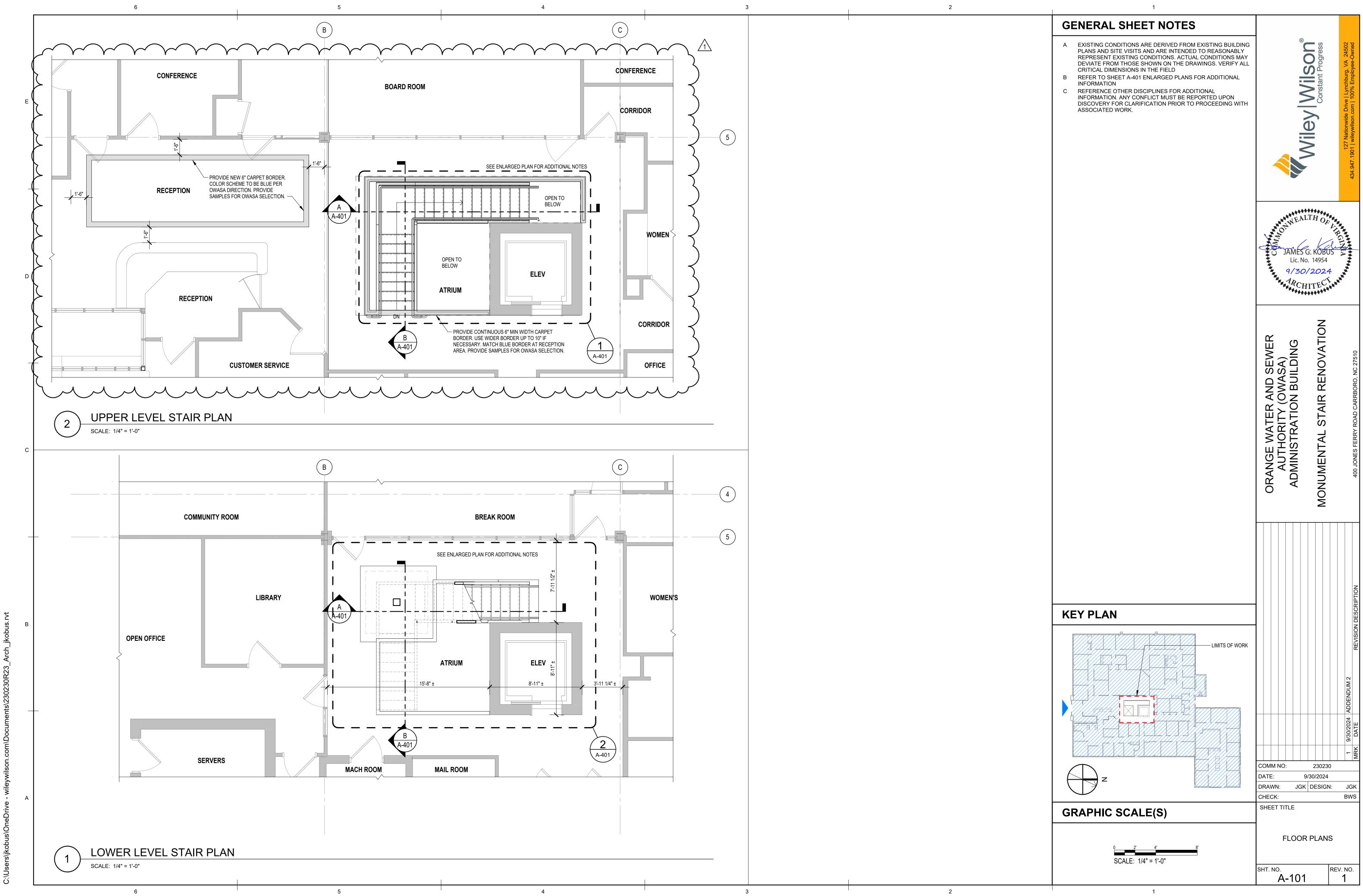
**GENERAL SHEET NOTES** 

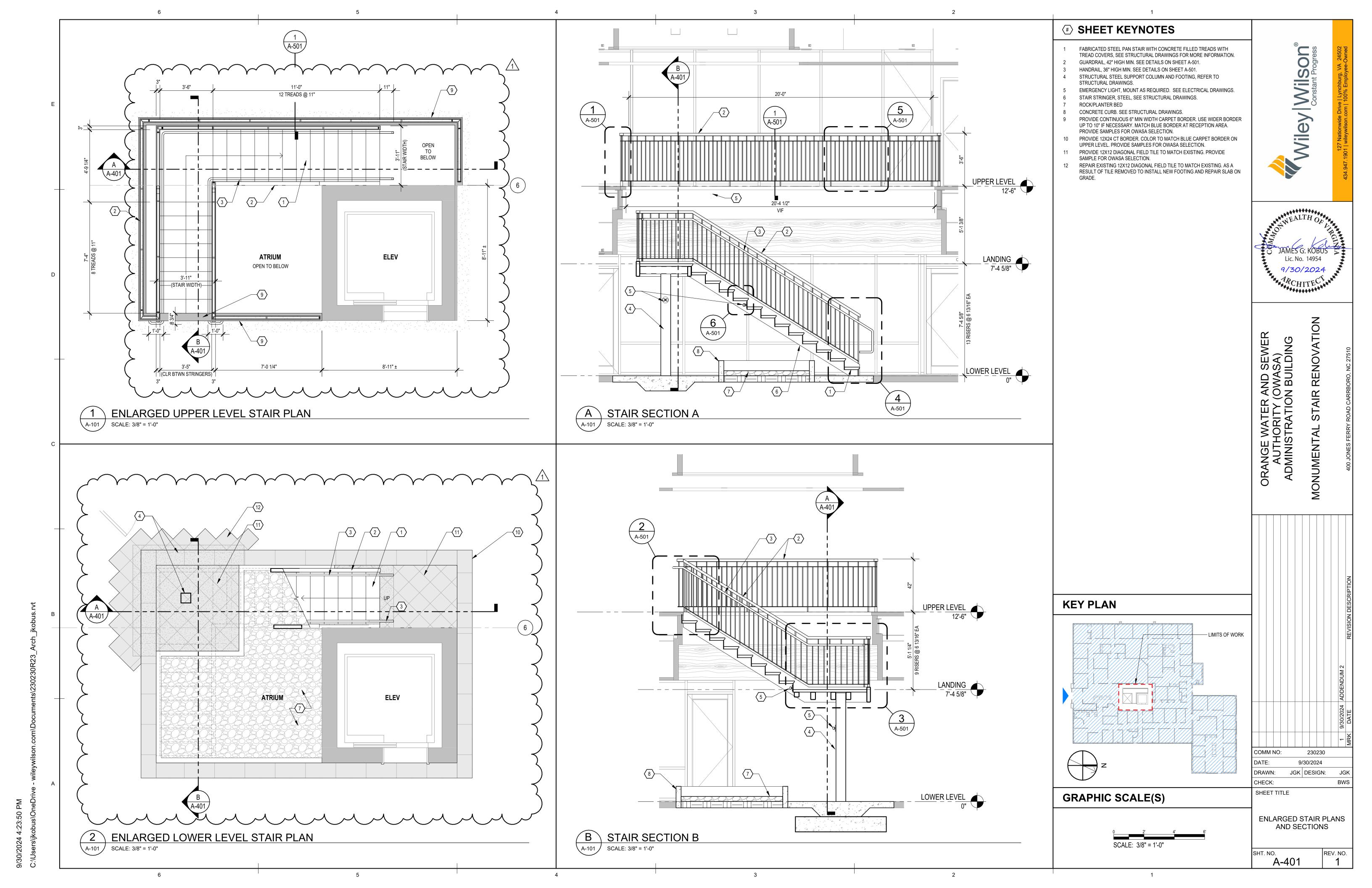
THIS TEMPORARY LIFE SAFETY PLAN IS SUPPLEMENTAL TO THE CONTRACT DOCUMENTS. THE CONTRACTOR IS STILL RESPONSIBILITY TO PROVIDE A CONSTRUCTION SCHEDULE, SELECTIVE DEMOLITION, NOISE CONTROL, SAFETY GUIDELINES, DUST CONTROL, AND RELAVENT REPORTS AND PLANNING

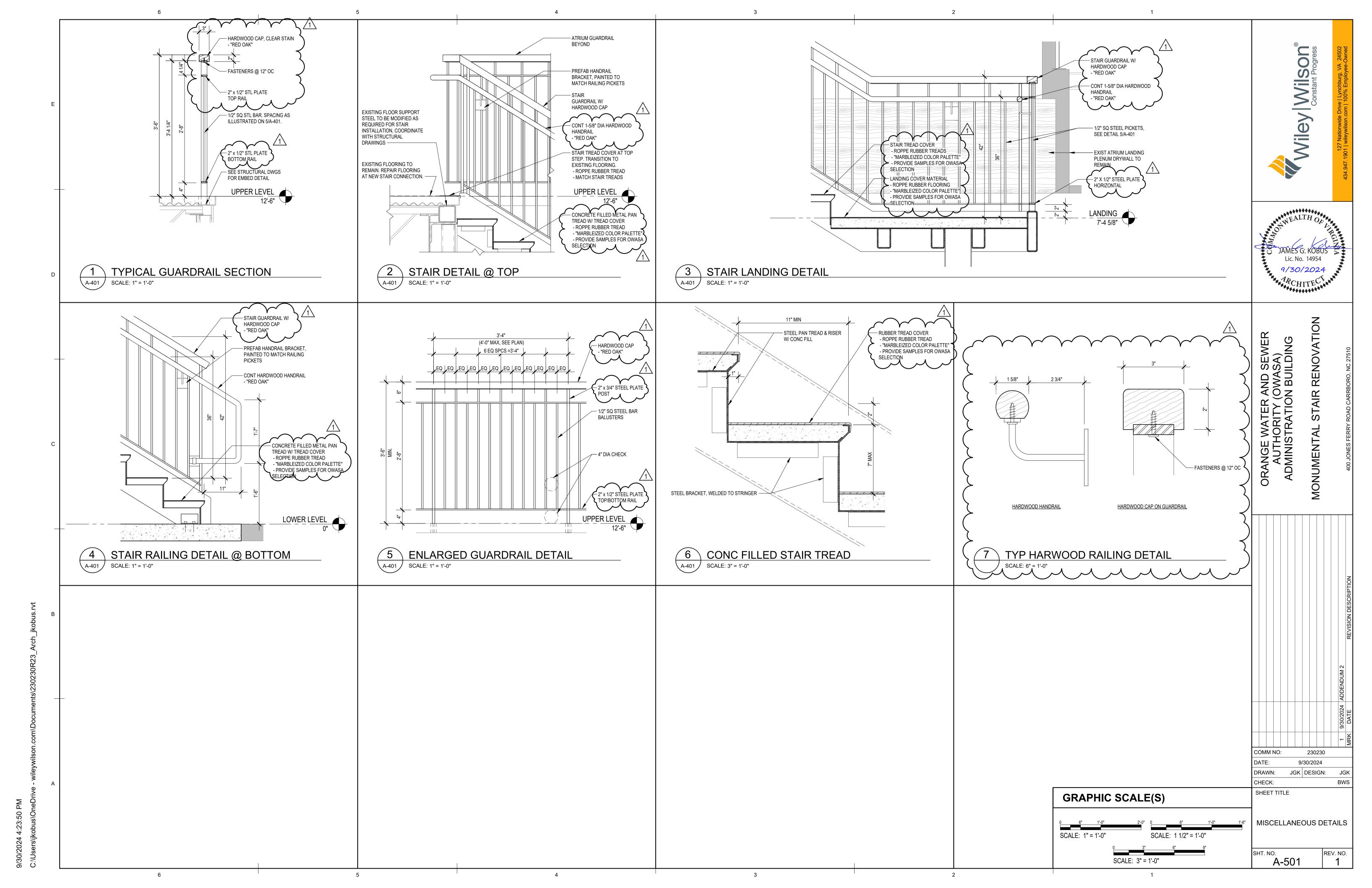
Wiley | Wilson © Constant Progress

AL003









- 1. AN INDEPENDENT AGENCY MUST PERFORM SPECIAL INSPECTIONS PER THE NORTH CAROLINA BUILDING CODE (2018 EDITION) SECTION 1704.2 AND THE INTERNATIONAL BUILDING CODE 2018. IN ACCORDANCE WITH INTERNATIONAL BUILDING CODE SECTION 1704.2.1, THE RESPONSIBLE INSPECTOR MUST MEET THE COMPETENCE AND RELEVANT EXPERIENCE OR TRAINING REQUIREMENTS OF THE STATE WHERE CONSTRUCTION TAKES PLACE. THESE INSPECTIONS ARE IN ADDITION TO THE INSPECTIONS SPECIFIED IN SECTION 1110.
- 2. WRITTEN REPORTS MUST BE SUBMITTED TO THE REGISTERED DESIGN PROFESSIONAL STATING COMPLIANCE OR NON-COMPLIANCE WITH DESIGN DOCUMENTS AND SPECIFICATIONS. ALL REPORTS MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE CONSTRUCTION TAKES PLACE.
- 3. WITH REGARDS TO SPECIAL INSPECTIONS:
- A. CONTINUOUS THE CONSTANT MONITORING OF SPECIFIC TASKS BY AN APPROVED SPECIAL INSPECTOR. THESE INSPECTIONS MUST BE CARRIED OUT CONTINUOUSLY OVER THE DURATION OF THE PARTICULAR TASKS.
- B. PERFORM PERFORM THESE TASKS FOR EACH ELEMENT, OCCURANCE, WELD, FASTENER OR
- BOLTED CONNECTION. C. OBSERVE - OBSERVE THESE SPECIAL INSPECTION ITEMS ON A PERIODIC DAILY BASIS.

REQUIRED IN THE SPECIAL INSPECTIONS GUIDE SPECIFICATION.

- OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS. D. DOCUMENT MEANS TO DOCUMENT, WITH A REPORT, THAT THE WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THIS IS IN ADDITION TO ANY OTHER REPORTS
- 4. FAILURE TO RETAIN AN INDEPENDENT TESTING AGENCY TO PERFORM THE REQUIRED SERVICES SPECIFIED ABOVE, OR FAILURE TO SUBMIT SIGNED AND SEALED REPORTS, INDICATES NON-COMPLIANCE WITH THE CONTRACT DOCUMENTS.

# STRUCTURAL - CONCRETE CONSTRUCTION SECTION

CONCRETE CONSTRUCTION - VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH IBC 1705.3, 1(ACI 318 REFERENCES NOTED IN IBC TABLE)

NSPECTION REQ (Y/N)	I ACK		DESCRIPTION				
Y	1. INSPECT REINFORCEMENT AND VERIFY PLACEMENT	OBSERVE	VERIFY PRIOR TO PLACING CONCRETE THAT REINFORCING IS OF SPECIFIED TYPE GRADE AND SIZE; THAT IS FREE OF OIL, DIRT AND UNACCEPTABLE RUST; THAT IS LOCATED AND SPACED PROPERLY; THAT HOOKS, BENDS, TIES, STIRRUPS AND SUPPLEMENTAL REINFORCEMENT ARE PLACED CORRECTLY; THAT LAP LENGTHS, STAGGER AND OFFSETS ARE PROVIDED; AND THAT ALL MECHANICAL CONNECTIONS ARE INSTALLED PER THE MANUFACTURER'S INSTRUCTIONS AND/OR EVALUATION REPORT				
NA	2. REINFORCING BAR WELDING	OBSERVE	-VERIFY WELDABILITY OF REINFORCING BARS OTHER THA ASTM A 706 -INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16" IN ACCORDANCE WITH AWS D1.4				
NA	3. ALL OTHER WELDING	CONTINUOUS	VISUALLY INSPECT ALL WELDS IN ACCORDANCE WITH AWS D1.4				
Y	4. CAST IN PLACE ANCHORS (DOWNWARD INCLINED)	OBSERVE	VERIFY PRIOR TO PLACING CONCRETE THAT CAST IN PLACE ANCHOR HAVE PROPER EMBEDMENT, SPACING AND EDGE DISTANCE				
N	5. POST-INSTALLED ADHESIVE ANCHORS IN HORIZONTAL OR UPWARD INCLINED ORIENTATION	CONTINUOUS & DOCUMENT	-INSPECT AS REQUIRED PER APPROVED ICC-ES REPORT -VERIFY THAT INSTALLER IS CERTIFIED FOR INSTALLATION OF HORIZONTAL AND OVERHEAD APPLICATIONS -INSPECT PROOF LOADING AS REQUIRED BY THE CONTRACT DOCUMENTS				
Υ	6. VERIFY USE OF REQUIRED MIX DESIGN	OBSERVE	VERIFY THAT ALL MIXES USED COMPLY WITH THE APPROVED CONSTRUCTION DOCUMENTS				
Y	PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE	CONTINUOUS	AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TEST VERIFY THESE TESTS ARE PERFORMED BY QUALIFIED TECHNICIANS				
Y	8. INSPECT CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	CONTINUOUS	VERIFY PROPER APPLICATION TECHNIQUES ARE USED DURING CONCRETE CONVEYANCE AND DEPOSITING AVOIDS SEGREGATION OR CONTAMINATION. VERIFY THAT CONCRETE IS PROPERLY CONSOLIDATED				
Υ	9. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUE	OBSERVE	INSPECT CURING, COLD WEATHER PROTECTION, AND HOT WEATHER PROTECTION PROCEDURES				
Y	INSPECT FORMWORK FOR SHAPE, LOCATION AND 10. DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED	OBSERVE					
Y	11. INSPECT DEFECTS IN THE CONCRETE AND DOCUMENT ANY REPAIRS MADE	CONTINUOUS & DOCUMENT	VERIFY THE INTEGRITY OF ANY REPAIRS MADE TO CONCRETE DUE TO DEFECTS WITH POST-PLACEMENT TEST REPORTS. VERIFY THAT CONCRETE IS PROPERLY INSTALLED				

# STRUCTURAL STEEL - WELDED SECTION

INSPECTION REQ (Y/N)	TASK	INSPECTION TYPE	DESCRIPTION		
Υ	1. VERIFY THAT THE WELDING PROCEDURES SPECIFICATION (WPS) IS AVAILABLE	PERFORM			
Υ	2. VERIFY MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES ARE AVAILABLE	PERFORM			
Υ	3. VERIFY MATERIAL IDENTIFICATION	PERFORM	TYPE AND GRADE		
Υ	4. WELDER IDENTIFICATION SYSTEM	PERFORM	THE FABRICATOR OR ERECTOR, AS APPLICABLE, MUST MAINTAIN A SYSTEM BY WHICH A WELDER WHO HAS WELDED A JOINT OR MEMBER CAN BE IDENTIFIED. STAMPS, IF USED SHALL BE THE LOW-STRESS TYPE		
			-JOINT PREPARATION		
N	5. FIT-UP GROOVE WELDS (INCLUDING JOINT GEOMETERY)	OBSERVE	-DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL)		
			-CLEANLINESS (CONDITION OF STEEL SURFACES)		
			-TACKING (TACK WELD QUALITY AND LOCATION)		
			-BACKING TYPE AND FIT (IF APPLICABLE)		
			-DIMENSIONS (ALIGNMENT, GAPS AT ROOT)		
Υ	6. FIT-UP OF FILLET WELDS	OBSERVE	-CLEANLINESS (CONDITION STEEL SURFACES)		
			-TACKING (TACK WELD QUALITY AND LOCATION)		

STEEL INSPECTION DURING WELDED-VERIFY THE FOLLOWING ARE IN COMPLIANCE WITH IBC 1705.2.1, AISC 360-10: TABLE C-N5.4-2					
INSPECTION REQ (Y/N)	TASK	INSPECTION TYPE	DESCRIPTION		
Y	7. USE OF QUALIFIED WELDERS	PERFORM	WELDING BY WELDERS, WELDING OPERATORS, AND TACK WELDERS WHO ARE QUALIFIED IN CONFORMANCE WITH REQUIREMENTS		
Y	8. CONTROL AND HANDLING OF WELDING CONSUMABLES	OBSERVE	-PACKAGING		
ı	0. CONTROL AND HANDLING OF WELDING CONSONIABLES	OBSERVE	-ELECTRODE ATMOSPHERIC EXPOSURE CONTROL		
Υ	9. NO WELDING OVER CRACKED TACK WELDS	OBSERVE			
Y	40 ENVIDONMENTAL CONDITIONS	ODSEDVE	-WIND SPEED WITHIN LIMITS		
	10. ENVIRONMENTAL CONDITIONS	OBSERVE	-PRECIPITATION AND TEMPERATURE		
			-SETTINGS ON WELDING EQUIPMENT		
			-TRAVEL SPEED		
		OBSERIVE	-SELECTED WELDING MATERIALS		
Υ	11. WELDING PROCEDURES SPECIFICATIONS FOLLOWED		-SHIELDING GAS TYPE/FLOW RATE		
·			-PREHEAT APPLIED		
			-INTERPASS TEMP MAINTAINED (MIN/MAX)		
			-PROPER POSITION (F, V, H, OH)		
			-INTERMIX OF FILLER MATERIAL AVOIDED		
		OBSERVE	-INTERPASS AND FINAL CLEANING		
Υ	12. WELDING TECHNIQUES		-EACH PASS WITHIN PROFILE LIMITATIONS		
			-EACH PASS MEETS QUALITY REQUIREMENTS		

# STEEL INSPECTION AFTER WELDING-VERFIY THE FOLLOWING ARE IN COMPLIANCE WITH IBC 2015 1705.2.1, AISC 360-10: TABLE C-N5.4-3

INSPECTION REQ (Y/N)	TASK	INSPECTION TYPE	DESCRIPTION
Υ	13. WELDS CLEANED	OBSERVE	
Υ	14. SIZE, LENGTH, AND LOCATION OF ALL WELDS	PERFORM	SIZE, LENGTH, AND LOCATION OF ALL WELDS CONFORM TO THE REQUIREMENTS OF THE DETAIL DRAWINGS
		PERFORM AND DOCUMENT	-CRACK PROHIBITION
			-WELD/BASE-METAL FUSION
			-CRATER CROSS SECTION
Y	15. WELDS MEET VISUAL ACCEPTANCE CRITERIA		-WELD PROFILES
			-WELD SIZE
			-UNDERCUT
			-POROSITY
Y	16. ARC STRIKES	PERFORM	
N	17. k-AREA	PERFORM	WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PERFORMED IN THE K-AREA, VISUALLY INSPECT THE WEB K-AREA FOR CRACKS
Υ	18. BACKING REMOVED, WELD TABS REMOVED AND FINISHED, AND FILLET WELDS ADDED WHERE REQUIRED	PERFORM AND DOCUMENT	
Υ	19. REPAIR ACTIVITIES	PERFORM AND DOCUMENT	
Y	20. DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	PERFORM	

Wilso



								09/30/2024   ADDENDA 2	REVISION DESCRIPTION
								09/30/2024	MRK DATE
								1	MRK
lΜ	NO	:		2	230	230	)		

08/16/2024 TAG DESIGN:

S-002

DRAWN:

SHEET TITLE

SPECIAL INSPECTIONS

#### SECTION 033000 - CAST-IN-PLACE CONCRETE

#### PART 1 - GENERAL

#### 1.1 SUMMARY

#### A. Section Includes:

- 1. Concrete standards.
- 2. Concrete materials.
- 3. Admixtures.
- 4. Vapor retarders.
- 5. Curing materials.
- 6. Accessories.
- 7. Repair materials.
- 8. Concrete mixture materials.
- 9. Concrete mixture class types.
- 10. Concrete mixing.

#### 1.2 ACTION SUBMITTALS

- A. Product data.
- B. Design Mixtures: For each concrete mixture, include the following:
  - 1. Mixture identification.
  - 2. Compressive strength at 28 days or other age as specified.
  - 3. Compressive strength required at stages of construction.
  - 4. Durability exposure classes for Exposure Categories F, S, W, and C.
  - 5. Maximum w/cm ratio.
  - 6. Slump or slump flow limit.
  - 7. Air content.
  - 8. Nominal maximum aggregate size.
  - 9. Intended placement method.
  - 10. Submit adjustments to design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant changes.

#### C. Shop Drawings

## 1.3 INFORMATIONAL SUBMITTALS

A. Testing Agency: Include documentation indicating compliance with ASTM E329 or ASTM C1077 and copies of applicable ACI certificates for testing technicians or ACI Concrete Construction Special Inspector - MH, ASCC.

- B. Material certificates.
- C. Material test reports.
- D. Field quality-control reports.

#### 1.4 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified Installer who employs Project personnel qualified as an ACI-certified Concrete Flatwork Associate and Concrete Flatwork Finisher and a supervisor who is a certified ACI Advanced Concrete Flatwork Finisher/Technician or an ACI Concrete Flatwork Finisher with experience installing and finishing concrete.
  - 1. Post-Installed Concrete Anchors Installers: ACI-certified Adhesive Anchor Installer.
- B. Laboratory Testing Agency Qualifications: A testing agency qualified in accordance with ASTM C1077 and ASTM E329 for testing that performs duties on behalf of the Architect/Engineer.
- C. Field Quality-Control Testing Agency Qualifications: An independent agency, acceptable to authorities having jurisdiction, qualified in accordance with ASTM C1077 and ASTM E329 for testing indicated.

#### 1.5 WARRANTY

- A. Manufacturer's Warranty: Manufacturer agrees to furnish replacement sheet vapor retarder and accessories for sheet vapor retarder and accessories that do not comply with requirements within specified warranty period.
  - 1. Warranty Period: 10 years from date of Substantial Completion.

#### PART 2 - PRODUCTS

#### 2.1 CONCRETE STANDARDS

A. ACI Publications: Comply with ACI 301 unless modified by requirements in the Contract Documents.

#### 2.2 CONCRETE MATERIALS

- A. Cementitious Materials:
  - 1. Portland Cement: ASTM C150/C150M, Type I Type II,.
  - 2. Pozzolans: ASTM C618, Class C, F, or N.
- B. Normal-Weight Aggregates:

- 1. Coarse Aggregate: ASTM C33/C33M, Class 3M
- 2. Maximum Foundation and Slab Coarse-Aggregate Size: 1 inch nominal.
- 3. Fine Aggregate: ASTM C33/C33M.

#### 2.3 ADMIXTURES

- A. Air-Entraining Admixture: ASTM C260/C260M.
- B. Chemical Admixtures: Do not use calcium chloride or admixtures containing calcium chloride in steel-reinforced concrete.
  - 1. Water-Reducing Admixture: ASTM C494/C494M, Type A.
  - 2. Retarding Admixture: ASTM C494/C494M, Type B.
  - 3. Water-Reducing and -Retarding Admixture: ASTM C494/C494M, Type D.
  - 4. High-Range, Water-Reducing Admixture: ASTM C494/C494M, Type F.
  - 5. High-Range, Water-Reducing and -Retarding Admixture: ASTM C494/C494M, Type G.
  - 6. Admixtures with special properties, with documentation of claimed performance enhancement, ASTM C494/C494M, Type S.
  - 7. Set-Accelerating Corrosion-Inhibiting Admixture: ASTM C1582/C1582M.
- C. Mixing Water for Concrete Mixtures and Water Used to Make Ice: ASTM C1602/C1602M. Include documentation of compliance with limits for alkalis, sulfates, chlorides, or solids content of mixing water from Table 2 in ASTM C1602/C1602M.

#### 2.4 VAPOR RETARDERS

A. Sheet Vapor Retarder, Class A: ASTM E1745, Class A. Include manufacturer's recommended thickness and adhesive or pressure-sensitive tape.

#### 2.5 CURING MATERIALS

- A. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete.
- B. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. when dry.
- C. Moisture-Retaining Cover: ASTM C171, polyethylene film burlap-polyethylene sheet.
  - 1. Color:
    - a. Ambient Temperature Below 50 deg F (10 deg C): Black.
    - b. Ambient Temperature between 50 and 85 deg F (10 and 29 deg C): Any color.
    - c. Ambient Temperature Above 85 deg F (29 deg C): White.
- D. Curing Paper: 8 ft. wide paper, consisting of two layers of fibered kraft paper laminated with double coating of asphalt.

E. Water: Potable water that does not cause staining of the surface.

#### 2.6 ACCESSORIES

- A. Expansion- and Isolation-Joint-Filler Strips: ASTM D1751, asphalt-saturated cellulosic fiber or ASTM D1752, cork or self-expanding cork.
- B. Bonding Agent: ASTM C1059/C1059M, Type II, nonredispersible, acrylic emulsion or styrene butadiene.
- C. Epoxy Bonding Adhesive: ASTM C881/C881M, two-component epoxy resin, capable of humid curing and bonding to damp surfaces, of class suitable for application temperature and of grade and class to suit requirements, and as follows:
  - 1. Types IV and V, load bearing, for bonding hardened or freshly mixed concrete to hardened concrete.

# 2.7 REPAIR MATERIALS

- A. Repair Underlayment: Cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/8 inch and that can be feathered at edges to match adjacent floor elevations.
- B. Repair Overlayment: Cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/4 inch and that can be filled in over a scarified surface to match adjacent floor elevations.

#### 2.8 CONCRETE MIXTURE MATERIALS

- A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, in accordance with ACI 301.
  - 1. Use a qualified testing agency for preparing and reporting proposed mixture designs, based on laboratory trial mixtures.
- B. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland or hydraulic cement in concrete assigned to Exposure Class F3 as follows:
  - 1. Fly Ash or Other Pozzolans: 30 percent by mass.
- C. Admixtures: Use admixtures in accordance with manufacturer's written instructions.

#### 2.9 CONCRETE MIXTURE CLASS TYPES

- A. Class A: Normal-weight concrete used for footings, grade beams, and tie beams.
  - 1. Exposure Class: ACI 318 Class F0 Class S0 Class W0 Class C0.

- 2. Minimum Compressive Strength: 4000 psi at 28 days.
- 3. Maximum w/cm Ratio: 0.50.
- 4. Slump Limit: 5 inches, plus or minus 1-1/2 inches for concrete.
- 5. Limit water-soluble, chloride-ion content in hardened concrete to 1.00 percent by weight of cementitious materials.
- B. Class C: Normal-weight concrete used for interior slabs-on-ground.
  - 1. Exposure Class: ACI 318 Class F0 Class S0 Class W0 Class C0.
  - 2. Minimum Compressive Strength: 4000 psi at 28 days.
  - 3. Maximum w/cm Ratio: 0.50.
  - 4. Slump Limit: 5 inches, plus or minus 1.5 inches for concrete.
  - 5. Air Content:
    - a. Do not use an air-entraining admixture or allow total air content to exceed 3 percent for concrete used in trowel-finished floors.
  - 6. Limit water-soluble, chloride-ion content in hardened concrete to 1.00 percent by weight of cement.
- C. Class I: Normal-weight concrete used for interior metal pan stairs and landings:
  - 1. Exposure Class: ACI 318 Class F0 Class S0 Class W0 Class C0.
  - 2. Minimum Compressive Strength: 3000 psi at 28 days.
  - 3. Maximum w/cm Ratio: 0.53.
  - 4. Maximum Size Aggregate: 1/2 inch.
  - 5. Slump Limit: 3 inches, plus 1 inch or minus 2 inches.
  - 6. Air Content: 0 percent, plus or minus 1.5 percent at point of delivery.
  - 7. Limit water-soluble, chloride-ion content in hardened concrete to 1.00 percent by weight of cement.

#### 2.10 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete in accordance with ASTM C94/C94M and furnish delivery ticket.
- B. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete in accordance with ASTM C94/C94M. Mix concrete materials in appropriate drum-type batch machine mixer.
  - 1. For mixer capacity of 1 cu. yd. or smaller, continue mixing at least 1-1/2 minutes, but not more than five minutes after ingredients are in mixer, before any part of batch is released.
  - 2. For mixer capacity larger than 1 cu. yd., increase mixing time by 15 seconds for each additional 1 cu. yd..
  - 3. Provide batch ticket for each batch discharged and used in the Work, indicating Project identification name and number, date, mixture type, mixture time, quantity, and amount of water added. Record approximate location of final deposit in structure.

#### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Before placing concrete, verify that installation of concrete forms, accessories, reinforcement, and embedded items is complete and that required inspections have been performed.
- B. Do not proceed until unsatisfactory conditions have been corrected.

#### 3.2 TOLERANCES

A. Comply with ACI 117.

#### 3.3 INSTALLATION OF EMBEDDED ITEMS

A. Place and secure anchorage devices and other embedded items required for adjoining Work that is attached to or supported by cast-in-place concrete.

#### 3.4 INSTALLATION OF VAPOR RETARDERS

- A. Sheet Vapor Retarders: Place, protect, and repair sheet vapor retarder in accordance with ASTM E1643 and manufacturer's written instructions.
- B. Bituminous Vapor Retarders: Place, protect, and repair bituminous vapor retarder in accordance with manufacturer's written instructions.

#### 3.5 INSTALLATION OF CAST-IN-PLACE CONCRETE

- A. Before placing concrete, verify that installation of formwork, reinforcement, embedded items, and vapor retarder is complete and that required inspections are completed.
- B. Notify Architect and testing and inspection agencies 24 hours prior to commencement of concrete placement.
- C. Water addition in transit or at the Project site must be in accordance with ASTM C94/C94M and must not exceed the permitted amount indicated on the concrete delivery ticket.
- D. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete is placed on concrete that has hardened enough to cause seams or planes of weakness.
- E. Deposit and consolidate concrete for floors and slabs in a continuous operation, within limits of construction joints, until placement of a panel or section is complete.

#### 3.6 INSTALLATION OF JOINTS

- A. Construct joints true to line, with faces perpendicular to surface plane of concrete.
- B. Construction Joints: Coordinate with floor slab pattern and concrete placement sequence.
  - 1. Install so strength and appearance of concrete are not impaired, at locations indicated on Drawings or as approved by Architect.
  - 2. Place joints perpendicular to main reinforcement.
    - a. Continue reinforcement across construction joints unless otherwise indicated.
  - 3. Form keyed joints as indicated. Embed keys at least 1-1/2 inches into concrete.
  - 4. Use epoxy-bonding adhesive at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
- C. Control Joints in Slabs-on-Ground: Form weakened-plane control joints, sectioning concrete into areas as indicated. Construct control joints for a depth equal to at least one-fourth of concrete thickness as follows:
  - 1. Grooved Joints: Form control joints after initial floating by grooving and finishing each edge of joint to a radius of 1/8 inch. Repeat grooving of control joints after applying surface finishes. Eliminate groover tool marks on concrete surfaces.
  - 2. Sawed Joints: Form control joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch wide joints into concrete when cutting action does not tear, abrade, or otherwise damage surface and before concrete develops random cracks.
- D. Isolation Joints in Slabs-on-Ground: After removing formwork, install joint-filler strips at slab junctions with vertical surfaces, such as column pedestals, foundation walls, grade beams, and other locations, as indicated.
  - 1. Extend joint-filler strips full width and depth of joint, terminating flush with finished concrete surface unless otherwise indicated on Drawings.
  - 2. Terminate full-width joint-filler strips not less than 1/2 inch or more than 1 inch below finished concrete surface, where joint sealants, are indicated.
  - 3. Install joint-filler strips in lengths as long as practicable. Where more than one length is required, lace or clip sections together.

#### E. Doweled Joints:

- 1. Install dowel bars and support assemblies at joints where indicated on Drawings.
- 2. Lubricate or asphalt coat one-half of dowel bar length to prevent concrete bonding to one side of joint.

# 3.7 APPLICATION OF FINISHING FORMED SURFACES

A. As-Cast Surface Finishes:

- 1. ACI 301 (ACI 301M) Surface Finish SF-2.0: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams.
  - a. Patch voids larger than 3/4 inch wide or 1/2 inch deep.
  - b. Remove projections larger than 1/4 inch.
  - c. Patch tie holes.
  - d. Surface Tolerance: ACI 117, Class B.
  - e. Locations: Apply to concrete surfaces or to be covered with a coating or covering material applied directly to concrete.
- 2. ACI 301 (ACI 301M) Surface Finish SF-3.0:
  - a. Patch voids larger than 3/4 inch wide or 1/2 inch deep.
  - b. Remove projections larger than 1/8 inch.
  - c. Patch tie holes.
  - d. Surface Tolerance: ACI 117 Class A.
  - e. Locations: Apply to concrete surfaces exposed to public view.

#### 3.8 INSTALLATION OF MISCELLANEOUS CONCRETE ITEMS

## A. Filling in:

- 1. Fill in holes and openings left in concrete structures after Work of other trades is in place unless otherwise indicated.
- 2. Mix, place, and cure concrete, as specified, to match color and texture with in-place construction exposed to view.
- 3. Provide other miscellaneous concrete filling indicated or required to complete the Work.
- B. Curbs: Provide monolithic finish to interior curbs by stripping forms while concrete is still green and by troweling surfaces to a hard, dense finish with corners, intersections, and terminations slightly rounded.
- C. Steel Pan Stairs: Provide concrete fill for steel pan stair treads, landings, and associated items.
  - 1. Cast-in inserts and accessories, as shown on Drawings.
  - 2. Screed, tamp, and trowel finish concrete surfaces.

#### 3.9 APPLICATION OF CONCRETE CURING

- A. Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
  - 1. Comply with ACI 301 for cold weather protection during curing.
  - 2. Comply with ACI 301 and ACI 305.1 for hot-weather protection during curing.
  - 3. Maintain moisture loss no more than 0.2 lb/sq. ft. x h, calculated in accordance with ACI 305R, before and during finishing operations.
- B. Curing Formed Surfaces: Comply with ACI 308.1 as follows:

- 1. Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces.
- 2. If forms remain during curing period, moist cure after loosening forms.
- 3. If removing forms before end of curing period, continue curing for remainder of curing period as follows:
  - a. Absorptive Cover: Pre-dampen absorptive material before application; apply additional water to absorptive material to maintain concrete surface continuously wet
  - b. Water-Retention Sheeting Materials: Cover exposed concrete surfaces with sheeting material, taping, or lapping seams.
- C. Curing Unformed Surfaces: Comply with ACI 308.1 as follows:
  - 1. Begin curing after finishing concrete.
  - 2. Interior Concrete Floors:
    - a. Floors to Receive Floor Coverings Specified in Other Sections: Contractor has option of the following:
      - 1) Absorptive Cover: As soon as concrete has sufficient set to permit application without marring concrete surface, install prewetted absorptive cover over entire area of floor.
        - a) Lap edges and ends of absorptive cover not less than 12 inches.
        - b) Maintain absorptive cover water saturated, and in place, for duration of curing period, but not less than seven days.

#### 3.10 INSTALLATION OF JOINT FILLING

A. Prepare, clean, and install joint filler in accordance with manufacturer's written instructions.

#### 3.11 INSTALLATION OF CONCRETE SURFACE REPAIRS

#### A. Defective Concrete:

- 1. Repair and patch defective areas when approved by Architect.
- 2. Remove and replace concrete that cannot be repaired and patched to meet specification requirements.
- B. Patching Mortar: Mix dry-pack patching mortar, consisting of 1 part portland cement to 2-1/2 parts fine aggregate passing a No. 16 sieve, using only enough water for handling and placing.
- C. Repairing Formed Surfaces: Surface defects include color and texture irregularities, cracks in excess of 0.01 inch spalls, air bubbles exceeding surface finish limits, honeycombs, rock pockets, fins and other projections on the surface exceeding surface finish limits, and stains and other discolorations that cannot be removed by cleaning.

- 1. Immediately after form removal, cut out honeycombs, rock pockets, and voids more than 1/2 inch in any dimension to solid concrete.
  - a. Limit cut depth to 3/4 inch.
  - b. Make edges of cuts perpendicular to concrete surface.
  - c. Clean, dampen with water, and brush-coat holes and voids with bonding agent.
  - d. Fill and compact with patching mortar before bonding agent has dried.
  - e. Fill form-tie voids with patching mortar or cone plugs secured in place with bonding agent.
- 2. Repair defects on surfaces exposed to view by blending white portland cement and standard portland cement, so that, when dry, patching mortar matches surrounding color.
  - a. Patch a test area at inconspicuous locations to verify mixture and color match before proceeding with patching.
  - b. Compact mortar in place and match surrounding surface.
- 3. Repair defects on concealed formed surfaces that will affect concrete's durability and structural performance, as determined by Architect.

#### D. Repairing Unformed Surfaces:

- 1. Test unformed surfaces, such as floors and slabs, for finish, and verify surface tolerances specified for each surface.
  - a. Correct low and high areas.
  - b. Test surfaces sloped to drain for trueness of slope and smoothness; use a sloped template.
- 2. Repair finished surfaces containing surface defects, including spalls, popouts, honeycombs, rock pockets, crazing, and cracks in excess of 0.01 inch wide or that penetrate to reinforcement or completely through unreinforced sections regardless of width.
- 3. After concrete has cured at least 14 days, correct high areas by grinding.
- 4. Correct localized low areas during, or immediately after, completing surface-finishing operations by adding patching mortar.
  - a. Finish repaired areas to blend into adjacent concrete.
- 5. Correct other low areas scheduled to receive floor coverings with a repair underlayment.
  - a. Prepare, mix, and apply repair underlayment and primer in accordance with manufacturer's written instructions to produce a smooth, uniform, plane, and level surface.
  - b. Feather edges to match adjacent floor elevations.
- 6. Correct other low areas scheduled to remain exposed with repair topping.
  - a. Cut out low areas to ensure a minimum repair topping depth of 1/4 inch to match adjacent floor elevations.

- b. Prepare, mix, and apply repair topping and primer in accordance with manufacturer's written instructions to produce a smooth, uniform, plane, and level surface.
- 7. Repair defective areas, except random cracks and single holes 1 inch or less in diameter, by cutting out and replacing with fresh concrete.
  - a. Remove defective areas with clean, square cuts, and expose steel reinforcement with at least a 3/4-inch clearance all around.
  - b. Dampen concrete surfaces in contact with patching concrete and apply bonding agent.
  - c. Mix patching concrete of same materials and mixture as original concrete, except without coarse aggregate.
  - d. Place, compact, and finish to blend with adjacent finished concrete.
  - e. Cure in same manner as adjacent concrete.
- 8. Repair random cracks and single holes 1 inch or less in diameter with patching mortar.
  - a. Groove top of cracks and cut out holes to sound concrete, and clean off dust, dirt, and loose particles.
  - b. Dampen cleaned concrete surfaces and apply bonding agent.
  - c. Place patching mortar before bonding agent has dried.
  - d. Compact patching mortar and finish to match adjacent concrete.
  - e. Keep patched area continuously moist for at least 72 hours.
- E. Perform structural repairs of concrete, subject to Architect's approval, using epoxy adhesive and patching mortar.
- F. Repair materials and installation not specified above may be used, subject to Architect's approval.

#### 3.12 FIELD QUALITY CONTROL

- A. Special Inspections: Owner will engage a special inspector to perform field tests and inspections and prepare testing and inspection reports.
- B. Testing Agency: Engage a qualified testing and inspecting agency to perform tests and inspections and to submit reports.
  - 1. Testing agency to be responsible for providing curing facility for initial curing of strength test specimens on-site and verifying that test specimens are cured in accordance with standard curing requirements in ASTM C31/C31M.
  - 2. Testing agency to immediately report to Architect, Contractor, and concrete manufacturer any failure of Work to comply with Contract Documents.
  - 3. Testing agency to report results of tests and inspections, in writing, to Owner, Architect, Contractor, and concrete manufacturer within 48 hours of inspections and tests.
- C. Delivery Tickets: Comply with ASTM C94/C94M.

# D. Inspections:

- 1. Headed bolts and studs.
- 2. Verification of use of required design mixture.
- 3. Concrete placement, including conveying and depositing.
- 4. Curing procedures and maintenance of curing temperature.
- 5. Verification of concrete strength before removal of shores and forms from beams and slabs
- 6. Batch Plant Inspections: On a random basis, as determined by Architect.
- E. Concrete Tests: Testing of composite samples of fresh concrete obtained in accordance with ASTM C 172/C 172M to be performed in accordance with the following requirements:
  - 1. Testing Frequency: Obtain one composite sample for each day's pour of each concrete mixture.
    - a. When frequency of testing provides fewer than five compressive-strength tests for each concrete mixture, testing is to be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
  - 2. Slump: ASTM C143/C143M:
    - a. One test at point of delivery for each composite sample, but not less than one test for each day's pour of each concrete mixture.
    - b. Perform additional tests as needed.
  - 3. Air Content: ASTM C231/C231M pressure method, for normal-weight concrete;.
    - a. One test for each composite sample when strength test specimens are cast, but not less than one test for each day's pour of each concrete mixture.
  - 4. Concrete Temperature: ASTM C1064/C1064M:
    - a. One test hourly when air temperature is 40 deg F and below or 80 deg F and above, and one test for each composite sample when strength test specimens are cast.
  - 5. Compression Test Specimens: ASTM C31/C31M:
    - a. Cast and standard cure two sets of three 6 inches by 12-inches or 4-inch by 8-inch cylindrical specimens for each composite sample.
  - 6. Compressive-Strength Tests: ASTM C39/C39M.
    - a. Test one set of three standard cured specimens at seven days and one set of two specimens at 28 days.
    - b. A compressive-strength test to be the average compressive strength from a set of two specimens obtained from same composite sample and tested at age indicated.
  - 7. Strength of each concrete mixture will be satisfactory if every average of any three consecutive compressive-strength tests of standard cured cylinders equals or exceeds specified compressive strength, and no compressive-strength test value falls below

- specified compressive strength by more than 500 psi if specified compressive strength is 5000 psi, or no compressive strength test value is less than 10 percent of specified compressive strength if specified compressive strength is greater than 5000 psi.
- 8. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as sole basis for approval or rejection of concrete.
- 9. Additional Tests:
  - a. Testing and inspecting agency to make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect.
  - b. Testing and inspecting agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C42/C42M or by other methods as directed by Architect.
    - 1) Acceptance criteria for concrete strength to be in accordance with ACI 301, Section 1.7.6.3.
- 10. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
- 11. Correct deficiencies in the Work that test reports and inspections indicate do not comply with the Contract Documents.

#### 3.13 PROTECTION

- A. Protect concrete surfaces.
- B. Protect from petroleum stains.
- C. Prohibit vehicles from interior concrete slabs.
- D. Prohibit placement of steel items on concrete surfaces.

END OF SECTION 033000

#### SECTION 055113 - METAL PAN STAIRS

#### PART 1 - GENERAL

#### 1.1 SUMMARY

#### A. Section Includes:

- 1. Preassembled steel stairs with concrete-filled treads.
- 2. Reference Section 05 73 00 Decorative Railings for railing information.

#### 1.2 COORDINATION

A. Coordinate selection of shop primers with topcoats to be applied over them. Comply with paint and coating manufacturers' written instructions to ensure that shop primers and topcoats are compatible with one another.

# 1.3 ACTION SUBMITTALS

- A. Product Data: For metal pan stairs and the following:
  - 1. Prefilled metal-pan-stair treads.
  - 2. Shop primer products.
  - 3. Handrail wall brackets.
- B. Shop Drawings:
  - 1. Include plans, elevations, sections, details, and attachments to other work.
  - 2. Indicate sizes of metal sections, thickness of metals, profiles, holes, and field joints.
  - 3. Include plan at each level.

#### 1.4 INFORMATIONAL SUBMITTALS

A. Welding certificates.

# 1.5 QUALITY ASSURANCE

- A. Welding Qualifications: Qualify procedures and personnel according to the following:
  - 1. AWS D1.1/D1.1M, "Structural Welding Code Steel."
  - 2. AWS D1.3/D1.3M, "Structural Welding Code Sheet Steel."

#### PART 2 - PRODUCTS

#### 2.1 PERFORMANCE REQUIREMENTS

- A. Structural Performance of Stairs: Metal stairs withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:
  - 1. Uniform Load: 100 lbf/sq. ft..
  - 2. Concentrated Load: 300 lbf applied on an area of 4 sq. in..
  - 3. Uniform and concentrated loads need not be assumed to act concurrently.
  - 4. Stair Framing: Capable of withstanding stresses resulting from railing and guard loads in addition to loads specified above.
  - 5. Limit deflection of treads, platforms, and framing members to L/360 or 1/4 inch, whichever is less.

#### 2.2 METALS

- A. Steel Plates, Shapes, and Bars: ASTM A36/A36M.
- B. Uncoated, Cold-Rolled Steel Sheet: ASTM A1008/A1008M, either commercial steel, Type B, or structural steel, Grade 25, unless another grade is required by design loads; exposed.
- C. Uncoated, Hot-Rolled Steel Sheet: ASTM A1011/A1011M, either commercial steel, Type B, or structural steel, Grade 30, unless another grade is required by design loads.

#### 2.3 FASTENERS

- A. General: Provide zinc-plated fasteners with coating complying with ASTM B633 or ASTM F1941/F1941M, Class Fe/Zn 12 for exterior use, and Class Fe/Zn 5 where built into exterior walls.
  - 1. Select fasteners for type, grade, and class required.
- B. Post-Installed Anchors: Torque-controlled expansion anchors or chemical anchors capable of sustaining, without failure, a load equal to six times the load imposed when installed in unit masonry and four times the load imposed when installed in concrete, as determined by testing according to ASTM E488/E488M, conducted by a qualified independent testing agency.
  - 1. Material for Interior Locations: Carbon-steel components zinc plated to comply with ASTM B633 or ASTM F1941/F1941M, Class Fe/Zn 5, unless otherwise indicated.

#### 2.4 MISCELLANEOUS MATERIALS

A. Handrail Wall Brackets: Cast nickel-silver, Cast aluminum, Cast bronze, Cast stainless steel, center of rail 3-1/8 inches from face of wall.

- 1. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by one of the following:
  - a. <u>Julius Blum & Co., Inc.</u>
  - b. The Wagner Companies.
- B. Shop Primers: Provide primers that comply with Section 099123 "Interior Painting."
- C. Universal Shop Primer: Fast-curing, lead- and chromate-free, universal modified-alkyd primer complying with MPI#79 and compatible with topcoat.
  - 1. Use primer containing pigments that make it easily distinguishable from zinc-rich primer.
- D. Zinc-Rich Primer: Comply with SSPC-Paint 20, Type II, Level 2, and compatible with topcoat.
- E. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D1187/D1187M.
- F. Prefilled Concrete Treads:
  - 1. Concrete Materials and Properties: Comply with requirements in Structural Drawings for normal-weight, air-entrained, ready-mix concrete with minimum 28-day compressive strength of 3000 psi and maximum aggregate size of 1/2 inch unless otherwise indicated.

#### 2.5 FABRICATION, GENERAL

- A. Provide complete stair assemblies, including metal framing, hangers, struts, clips, brackets, bearing plates, and other components necessary to support and anchor stairs and platforms on supporting structure.
  - 1. Join components by welding unless otherwise indicated.
  - 2. Use connections that maintain structural value of joined pieces.
- B. Assemble stairs in shop to greatest extent possible.
  - 1. Disassemble units only as necessary for shipping and handling limitations.
  - 2. Clearly mark units for reassembly and coordinated installation.
- C. Cut, drill, and punch metals cleanly and accurately.
  - 1. Remove burrs and ease edges to a radius of approximately 1/32 inch unless otherwise indicated.
  - 2. Remove sharp or rough areas on exposed surfaces.
- D. Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing work.
- E. Form exposed work with accurate angles and surfaces and straight edges.
- F. Weld connections to comply with the following:

- 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
- 2. Obtain fusion without undercut or overlap.
- 3. Remove welding flux immediately.
- 4. Comply with AESS 3 as defined in Section 05 12 13 "Architecturally Exposed Structural Steel."
- G. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners where possible.
  - 1. Where exposed fasteners are required, use Phillips flat-head (countersunk) screws or bolts unless otherwise indicated.
  - 2. Locate joints where least conspicuous.
  - 3. Fabricate joints that will be exposed to weather in a manner to exclude water.
  - 4. Provide weep holes where water may accumulate internally.

#### 2.6 FABRICATION OF STEEL-FRAMED STAIRS

- A. NAAMM Stair Standard: Comply with NAAMM AMP 510, "Metal Stairs Manual," for Architectural Class, unless more stringent requirements are indicated.
- B. Stair Framing:
  - 1. Stringers: Fabricate stringers of steel rectangular tubes as indicated on Drawings.
    - a. Stringer Size: As indicated on Drawings.
    - b. Provide closures for exposed ends of channel and rectangular tube stringers.
    - c. Finish: Shop primed.
  - 2. Platforms: Construct of steel plate or steel rectangular tube headers and miscellaneous framing members as indicated on Drawings.
    - a. Provide closures for exposed ends of channel and rectangular tube framing.
    - b. Finish: Shop primed.
  - 3. Weld or bolt stringers to headers; weld or bolt framing members to stringers and headers. If using bolts, fabricate and join so bolts are not exposed on finished surfaces.
- C. Metal Pan Stairs: Form risers, subtread pans, and subplatforms to configurations shown from steel sheet of thickness needed to comply with performance requirements, but not less than 0.067 inch.
  - 1. Steel Sheet: Uncoated, cold-rolled steel sheet unless otherwise indicated.
  - 2. Directly weld metal pans to stringers; locate welds on top of subtreads where they will be concealed by concrete fill. Do not weld risers to stringers.
  - 3. Attach risers and subtreads to stringers with brackets made of steel angles or bars. Weld brackets to stringers and attach metal pans to brackets by welding, riveting, or bolting.
  - 4. Shape metal pans to include nosing integral with riser.
  - 5. At Contractor's option, provide stair assemblies with metal pan subtreads filled with reinforced concrete during fabrication.

- 6. Provide subplatforms of configuration indicated or, if not indicated, the same as subtreads. Weld subplatforms to platform framing.
  - a. Smooth Soffit Construction: Construct subplatforms with flat metal under surfaces to produce smooth soffits.

#### 2.7 FABRICATION OF STAIR RAILINGS AND GUARDS

A. Comply with applicable requirements in Section 057300 "Decorative Metal Railings."

#### 2.8 FINISHES

- A. Finish metal stairs after assembly.
- B. Preparation for Shop Priming: Prepare uncoated, ferrous-metal surfaces to comply with SSPC-SP 3, "Power Tool Cleaning."
- C. Apply shop primer to uncoated surfaces of metal stair components, except those with galvanized finishes and those to be embedded in concrete or masonry unless otherwise indicated. Comply with SSPC-PA 1, "Paint Application Specification No. 1: Shop, Field, and Maintenance Painting of Steel," for shop painting.

#### **PART 3 - EXECUTION**

## 3.1 INSTALLATION OF METAL PAN STAIRS

- A. Fastening to In-Place Construction: Provide anchorage devices and fasteners where necessary for securing metal stairs to in-place construction.
  - 1. Include threaded fasteners for concrete and masonry inserts, through-bolts, lag bolts, and other connectors.
- B. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installing metal stairs. Set units accurately in location, alignment, and elevation, measured from established lines and levels and free of rack.
- C. Install metal stairs by welding stair framing to steel structure or to weld plates cast into concrete unless otherwise indicated.
  - 1. Grouted Baseplates: Clean concrete- and masonry-bearing surfaces of bond-reducing materials, and roughen surfaces prior to setting plates.
    - a. Clean bottom surface of plates.
    - b. Set plates for structural members on wedges, shims, or setting nuts.
    - c. Tighten anchor bolts after supported members have been positioned and plumbed.
    - d. Do not remove wedges or shims but, if protruding, cut off flush with edge of plate before packing with grout.

- e. Promptly pack grout solidly between bearing surfaces and plates so no voids remain.
  - 1) Neatly finish exposed surfaces; protect grout and allow to cure.
  - 2) Comply with manufacturer's written installation instructions for shrinkageresistant grouts.
- D. Provide temporary bracing or anchors in formwork for items that are to be built into concrete, masonry, or similar construction.
- E. Fit exposed connections accurately together to form hairline joints.
  - 1. Weld connections that are not to be left as exposed joints but cannot be shop welded because of shipping size limitations.
  - 2. Do not weld, cut, or abrade surfaces of exterior units that have been hot-dip galvanized after fabrication and are for bolted or screwed field connections.
  - 3. Comply with requirements for welding in "Fabrication, General" Article.
- F. Place and finish concrete fill for treads and platforms to comply with "Concrete Notes" section of Structural Drawings for strength and testing requirements.

#### 3.2 REPAIR

A. Touchup Painting: Cleaning and touchup painting of field welds, bolted connections, and abraded areas of shop paint are specified in Section 099123 "Interior Painting."

END OF SECTION 055113

#### PRICE PROPOSAL

(LUMP SUM CONTRACT - BID FORM)

ARTICLE 1 - BID RECIPIENT

1.01 This Bid is submitted to:

TODD TAYLOR EXECUTIVE DIRECTOR ORANGE WATER AND SEWER AUTHORITY 400 JONES FERRY ROAD CARRBORO, NORTH CAROLINA 27510 (919) 968-4421

Date: 11th day of September, 2024

OWASA CIP: #280 -22

Project: Administration Building Stair Replacement				
Name of Bidder:				
Phone Number of Bidder	er:			
Contact Person for Bidde	er:			
Phone Number of Contact:				
Bidder's NC General Contractor's License Number (required):				

- 1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Orange Water and Sewer Authority in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.
- 1.03 The undersigned Bidder hereby declares that the names of all persons interested in this Bid as principals appear in the blank spaces hereinafter provided for such purpose, that this Bid is in all respects fair and without collusion, that the Bidder has examined the locations of the proposed Work, the Advertisement to Bidders, the Instructions to Bidders, Technical Specifications, M/WBE requirements of Orange Water and Sewer Authority, the Contract Documents and Bond forms, and the Drawings therein referred to and fully understands the same and agrees and accepts the terms and conditions thereof, that it is understood that the estimated quantities are approximate only and are given for the purpose of comparing



Bids upon a uniform basis, and that said estimate shall in no way affect the unit prices for the Work.

- 1.04 The undersigned Bidder hereby agrees to furnish at the Bidder's cost the expense of all the necessary labor, tools, apparatus, machinery, equipment, transportation, and all other things which may be required to fully and properly perform all the terms, covenants, provisions, and agreements of this Contract.
- 1.05 The undersigned Bidder hereby agrees to do said Work and furnish said materials as prescribed in the Contract Documents and Technical Specifications, and, according to the Drawings and requirements of the Engineer under said Contract Documents and Technical Specifications, in a first-class manner and to the best of the undersigned's ability at the following lump sum or unit prices.
- 1.06 The undersigned Bidder has examined the Site of the Work and all matters referred to in the Instructions to Bidders and the Contract Documents prepared by the Engineer for the Project, we, the undersigned Bidder, hereby offers to enter into a Contract to perform the Work for the lump sum or unit prices listed in this Bid Form in lawful money of the United States of America.
- 1.07 The undersigned Bidder acknowledges that it is the intent of these Contract Documents to obtain a Contract based on a Lump Sum Bid Price, unless Unit Prices are applied to the various portions of the Work and are specifically requested. In the event of errors in the arithmetical extension of unit prices to total prices, the unit price bid shall govern, and the Award of the Contract shall be based on the recomputed total prices. Where discrepancy exists between words and numerals, the written words shall govern. If a Bidder submits a Bid showing a unit price for a particular item and omits an extended total for that item, or a Bidder submits a Bid showing an extended total for a particular item and omits a unit price for that item, the omitted numbers shall be computed using the equation "Estimated Quantity x Unit Bid Price = Extended Total", so that the omission shall not render the Bid nonresponsive or incomplete. If the Bidder leaves blank any lines or spaces indicated for the dollar amount of any item in the Bid, that omission will be understood and treated as if the Bidder had written in zero dollars (\$0.00) for that particular item in the Bid. Before applying the preceding two (2) sentences this paragraph, the following rule shall apply in the special case that it describes: In places where it is indicated that a Bid should show both words and numerals for a particular dollar amount, if the Bid shows the dollar amount in numerals but omits to show any dollar amount in words (or vice versa), the Bid shall be treated as if it had shown the indicated dollar amount in both numerals and words.
- 1.08 The undersigned Bidder shall be required to submit a complete detailed cost breakdown of the Lump Sum Bid for payment purposes, for approval by the Engineer, <u>prior</u> to the Award of the Contract.
- 1.09 The undersigned Bidder acknowledges that all costs for mobilization, demobilization, bonds, insurance, etc. shall be included in the Lump Sum Bid Price indicated. There shall be no additional compensation for mobilization, demobilization, bonds, insurance, etc. and no adjustments to the Lump Sum Bid based on changes in the scope of Work, including but not limited to, any additions to the Work on the Contract.



- 1.10 The undersigned Bidder acknowledges that the Project will be Awarded to the lowest responsible, responsive Bidder for the Project, as selected by Orange Water and Sewer Authority whose evaluation indicates that the Award will be in the best interest of the Project.
- 1.11 The undersigned Bidder acknowledges that all blanks on the Bid Form shall be completed by printing in ink or by typewriter and the Bid signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid Price shall be indicated for the Lump Sum or each Unit Price item listed therein, or the words, "No Bid", "No Change", or "Not Applicable" entered."
- 1.12 The undersigned Bidder acknowledges that the omission of prices for any item on the Bid Form, or the tendering of any unbalanced Bid may be the cause for the rejection of the submitted Bid.
- 1.13 The undersigned Bidder acknowledges that the payment will be made on the basis of the Work as actually executed at the Lump Sum or unit prices set forth in the executed Contract and under the provisions of such Contract.
- 1.14 The undersigned Bidder acknowledges that there shall be no additional compensation to the Bidder for materials, equipment, or Work that is incidental to the successful completion of the Contract. Incidental costs include the costs inherent to the complete installation of those individual items included on the Bid Form.
- 1.15 The undersigned Bidder acknowledges that the Non-Collusive Affidavit for the Contractor shall be submitted with the Bid, and Non-Collusive Affidavit(s) for all Subcontractors (all tiers) for the apparent low Bidder shall be submitted within five (5) calendar days of the Bid Opening.

#### 1.16 NOT USED

- 1.17 The undersigned Bidder agrees to comply with all requirements of local, State, or Federal permits that may be required for the completion of the Work.
- 1.18 The undersigned Bidder shall have all proper Contractors licenses and privilege licenses required under State and local laws governing their respective trade(s).
- 1.19 The undersigned agrees that the rights of Orange Water and Sewer Authority and the recommendations of the Engineer are not to be questioned in the Award of a Contract.
- 1.20 The undersigned Bidder certifies compliance with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes ("E-Verify"), and represents that it will require any subcontractors to comply with the requirements of Article 2 of Chapter 64 of the General Statutes.
- 1.21 The undersigned Bidder certifies compliance with the requirements of Article 6 of Chapter 143 of the North Carolina General Statutes ("Iran Divestment") and that it is not listed on the State Treasurer's Final Divestment List found at the website address <a href="https://www.nctreasurer.com/Iran">www.nctreasurer.com/Iran</a> and updated every 180 days, and represents that it will require an



y subcontractors to comply with the requirements of Article 6 of Chapter 143 of the General Statutes.

#### ARTICLE 2 - BIDDER'S ACKNOWLEDGEMENTS

- 2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid shall remain open and remain subject to acceptance, and is irrevocable, except as required by law, for ninety (90) calendar days from the Bid opening date, or for such longer period of time that Bidder may agree to in writing upon request of Orange Water and Sewer Authority.
- 2.02 If this Bid is accepted by Orange Water and Sewer Authority within the time period stated above, the Bidder will:
  - -Execute the Agreement within fifteen (15) days of receipt of Notice of Award.
  - -Furnish the required Bonds within fifteen (15) days of receipt of Notice of Award.
  - -Commence Work within ten (10) days after written Notice to Proceed.

#### 2.03 NOT USED

2.04 In the event Bid is not accepted by Orange Water and Sewer Authority within the time stated above, the required Bid security will be returned to the undersigned, in accordance with the provisions of the Instructions to Bidders; unless a mutually satisfactory arrangement is made for its retention and validity for an extended period of time.

#### ARTICLE 3 - BIDDER'S REPRESENTATIONS

- 3.01 In submitting this Bid, Bidder represents that:
  - A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

Addendum No.:	Addendum Date:
	-

B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

- C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.
- E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Siterelated reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.
- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

# ARTICLE 4 - BIDDER'S CERTIFICATION

#### 4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid:
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and



# ORANGE WATER AND SEWER AUTHORITY ADMINISTRATION BUILDING LOBBY STAIRS COMM. NO. 230230

D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:

"corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;

"fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Orange Water and Sewer Authority, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Orange Water and Sewer Authority of the benefits of free and open competition;

"collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Orange Water and Sewer Authority, a purpose of which is to establish bid prices at artificial, non-competitive levels; and

"coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the e execution of the Contract.

ARTICLE 5 – BASIS OF BID (LUMP SUM SINGLE PRIME BID PRICE)

5.01 CIP: **#280 -22** 

Project: Administration Building Stair Replacement

**Project Description:** 

## LUMP SUM BID SHALL INCLUDE:

Project includes replacement of monumental staircase in the central atrium between the upper and lower levels of their Administration Building. The existing stairs, structural supports, and railing including around the atrium will be demolished and replaced with an alternate layout. Electrical will be updated to meet emergency egress code. The lower-level rock garden extents will be adjusted to accommodate the new stair layout. The project includes furnishing and installing new stairwell, structural supports, lighting fixtures, repair to adjacent finishes, all associated appurtenances and other work as described in the Specifications and as shown on the Drawings.

<u>CONTINGENCY ALLOWANCE</u>: The Contractor shall include in its Bid a contingency allowance in the amount of \$50,000. The contingency allowance shall only be used at the specific direction and written approval of the Engineer.

The foregoing description shall not be construed as a complete description of all Work required.

The Lump Sum Single Prime Bid Price shall reflect all costs associated with furnishing and installing, and placing into service all items of Work as indicated on the Drawings and in the Technical Specifications, complete, in place, operable and accepted by Orange Water and Sewer Authority, per the Engineer's Contract Documents.



- 5.02 Orange Water and Sewer Authority has established a "Contingency Allowance" for this project. The contingency allowance is intended to provide adequate budget to cover items not precisely determined by Orange Water and Sewer Authority, and unforeseeable conditions prior to the Bid. Orange Water and Sewer Authority has provided for a contingency allowance of \$\sum\_{0.000}\$ as indicated in the Proposal. Funds allocated as part of the allowance will be used at the sole discretion of Orange Water and Sewer Authority. This allowance is included on the Bid Form in the Proposal, and will be included in the total amount of each Bid. Orange Water and Sewer Authority shall approve use of the contingency allowance funds prior to any Work associated with a contingency allowance being performed. The Contractor shall invoice items authorized for payment under the Contingency Allowance with its monthly pay applications. The amount invoiced will be deducted from the indicated amount.
- 5.03 Bidder shall complete the Work in accordance with the Contract Documents for the following TOTAL LUMP SUM BID PRICE:

\*\*\*REMAINDER OF PAGE LEFT BLANK INTENTIONALLY\*\*\*

#### **BID FORM**

# NOTE TO BIDDERS: <u>DO NOT REMOVE THIS BID FORM</u> <u>FROM THE CONTRACT DOCUMENTS</u>

# **LUMP SUM SINGLE PRIME CONTRACT**

## <u>Administration Building Stair Replacement</u>

ITEM NO.	DESCRIPTION	UNIT	BID PRICE
1	Administration Building Stair Replacement	LS	
2	CONTINGENCY ALLOWANCE		\$50,000
TOTAL LUN	IP SUM SINGLE PRIME BASE BID P	RICE	
(Item 1 + Ite	m 2)		
3	Bid Alternate 1: Atrium level carpet border in Reception Area per Drawing A-101.	LS	
4	Bid Alternate 2: Lower-level tile border per Drawing AD-401 Key Note 10.	LS	

# **Alternates:**

Should any of the alternates as described in the contract documents be accepted, the amount written above shall be the amount to be "added to" the base bid.

**TOTAL LUMP SUM SINGLE PRIME BASE BID PRICE** (Excluding Bid Alternates 1 and 2) for the Project described in Sub-Article 5.01, complete as indicated by the Contract Documents (in words and numerals):

		Dollars
and	Cents (\$	)
	Bidder(Print Name)	
	Bidder(Signature)	

# CERTIFIED LIST OF EQUIPMENT/MATERIAL MANUFACTURERS AND SUBCONTRACTORS

The Bidder,	Work to be done on said Project. The list of shed and Subcontractors shall be based on as to this list after the Bid opening shall only be upon request by the Contractor or as required
EQUIPMENT/MATERIALS	MANUFACTURER
WORK TASK	SUBCONTRACTOR

It is understood and agreed that, if awarded a Contract, the Contractor will not make any additions, deletions or substitutions to this certified list without the written consent of Orange Water and Sewer Authority.

#### **CERTIFICATION AFFIDAVIT**

THE ABOVE INFORMATION IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I FURTHER UNDERSTAND AND AGREE THAT, IF AWARDED A CONTRACT, THIS CERTIFICATION SHALL BE ATTACHED THERETO AND BECOME A PART THEREOF.

NAME OF SIGNER:			
	(Please Print or Type)		
TITLE OF SIGNER:			
	(Please Print or Type)		
	SIGNATURE:		
DATE:			

-END OF CERTIFICATION-

\*\*\*REMAINDER OF PAGE LEFT BLANK INTENTIONALLY\*\*\*

#### ARTICLE 6 - TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be Substantially Complete within [135] CONSECUTIVE CALENDAR DAYS, after the date when the Contract Time commences to run as provided in Paragraph 4.01 of the General Conditions and will be completed and ready for final payment in accordance with Paragraph 15.03 of the General Conditions within [160] CONSECUTIVE CALENDAR DAYS, of the date when the Contract Time commences to run
- 6.02 Bidder accepts the provisions of the Agreement as to Liquidated Damages.

#### ARTICLE 7 - ATTACHMENTS TO THIS BID

- 7.01 The following documents are submitted with and made a condition of this Bid:
  - A. NOT USED
  - B. List of Proposed Subcontractors;
  - C. List of Proposed Suppliers;
  - D. List of Project References;
  - E. Evidence of authority to do business in the State of North Carolina; or a written covenant to obtain such license within the time for acceptance of Bids;
  - F. Required Bidder Qualification Statement with supporting data;

#### ARTICLE 8 - BID CERTIFICATION

8.01 THE ABOVE INFORMATION IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I FURTHER UNDERSTAND AND AGREE THAT, IF AWARDED A CONTRACT, THIS CERTIFICATION SHALL BE ATTACHED THERETO AND BECOME A PART THEREOF.

SIGNATURE: _	
DATE:	

8.02 We agree to diligently perform the Work in accordance with all Contract Documents, to complete such Work within the period as outlined in the Contract, and to begin Work within ten (10) consecutive calendar days after receipt of the Notice to Proceed from Orange Water and Sewer Authority.



# ARTICLE 9 - CONTRACTOR EXPERIENCE

9.01	The undersigned Contra Work of this Class for a submitted that clearly de this information shall be	minimum of 10 years monstrates a minimum	A completed contracts of 10 years' experience	s summary shall be e. Failure to provide
9.02	List of Contractor's pers Superintendent to be in with this particular Work.	charge of this Work sh	owing the length of the	ir varied experience
	<u>Name</u>	Experience	<u>Name</u>	Experience
				_

# ORANGE WATER AND SEWER AUTHORITY ADMINISTRATION BUILDING LOBBY STAIRS COMM. NO. 230230

(	Con	of Contractor's equipment in good condition and suitable for completion of this Contract tractor must be able to demonstrate ownership of all equipment necessary to complete ortions of the Contract. The list shall not include Subcontractor equipment.
·		
•		
		Attach additional sheets as necessary to complete the items above.
ARTIC	CLE	10 - BID FORM SIGNATURES
10.01		efer to Document 00 21 15 for specific Bid Form signature requirements for corporations rtnerships, limited liability companies, individuals, or sole proprietorships.
ARTIO	CLE	11 - QUALIFICATIONS OF BIDDERS
11.01	W	order to assist the Owner in determining whether the Bidder is qualified to perform the ork, as set forth in the Contract Documents, the Bidder shall furnish the following ormation.
		List of references who are qualified to judge as to his financial responsibility and his experience in work of similar nature to that bid upon:
	b.	List of previous contracting experience that is similar in nature, including dollar values of contracts:
	<del>C.</del>	List of facilities or equipment that is available for use:
	d.	Name, residence, and title of the individual who will give personal attention to the
	е	work: Financial Statement:
	f.	Current projects, indicate value and completion date:
		ASSETS
		CURRENT ASSETS: Cash \$
		Notes and Accounts Receivable
		Inventories
		PLANT ASSETS:
		Real Estate \$
		Machinery
		Good Will, Patents, etc.
		<u>LIABILITIES</u> : Notes Payable \$
		Accounts Payable \$
		· ————

Proposal – Lump Sum Single-Prime Contract Bid Form
Administration Building Stair Replacement

Orange Water & Sewer Authority



Accrued Wages	_	
Other Liabilities	\$	
EXCESS OF		
ASSETS OR		
NET WORTH	\$	

#### Notes:

- The above is a suggested form for the Financial Statement, and the Bidder is not required to follow the form explicitly. The Financial Statement submitted must clearly show to the satisfaction of the Owner the Bidders current financial condition. The Owner reserves the privilege of requiring additional information as to financial responsibility of the Bidder prior to awarding Contract.
- 2. Bidder shall attach additional pages, if necessary, in order to complete the required information.
- 3. The Bidder shall submit detailed information required for above items 1 through 4 with his Bid package and at the discretion of the Bidder the information required under Item 5 can be furnished after Bids are received if required by the Owner and Engineer to evaluate the financial qualifications of a prospective Bidder.

Please attach additional sheets as necessary to complete the items above.

CORPORATION

ARTICLE 12 - SEQUENCE OF WORK NOT USED

ARTICLE 13 - INTERIM COMPLETION DATES NOT USED

<u> </u>
The Corporate Seal of
(Bidder - print the full legal corporate name of firm)
(President/Vice President/Authorized Corporate Officer)
(Seal)
was hereunto affixed in the presence of:
(Secretary/Assistant Secretary)
(Seal)
Corporate Address:

Proposal – Lump Sum Single-Prime Contract Bid Form Administration Building Stair Replacement



WILEY WILSON	ORANGE WATER AND SEWER AUTHORITY ADMINISTRATION BUILDING LOBBY STAIRS COMM. NO. 230230
	-
(State of Incorporation)	-

# **LIMITED LIABILITY COMPANY**

(Bidder - print the full legal name of firm
(Authorized Firm Member)
(Seal)
was hereunto affixed in the presence of:
(Witness)
(Seal)
Firm Address:
(State of Formation)

# INDIVIDUAL OR SOLE PROPRIETORSHIP

(Bidder - print the full name of individua	al or sole proprietorship)
(Seal)	
Individual or Sole Proprietorship Addre	ss:

# **PARTNERSHIP**

(Bidder - print the full legal corpo	rate name of partnership)
(Partner and Title)	(Partner and Title)
(Seal)	(Seal)
(Partner and Title)	(Partner and Title)
(Seal)	(Seal)
(Partner and Title)	(Partner and Title)
(Seal)	(Seal)
(Partner and Title)	(Partner and Title)
(Seal)	(Seal)
(Partner and Title)	(Partner and Title)
(Seal)	(Seal)
(All Partners shall sign, additional	I signatures with titles and seals may be added below.)
was hereunto affixed in the prese	ence of:
(Witness)	
(Seal)	
Partnership Address:	

# JOINT VENTURE

If the Bid is a joint venture, add additional forms of execution for each member of the joint venture in the appropriate manner using the forms from above.

# PROPOSAL SIGNATURE

Bidder operates under the	e legal name of	
BID	DERS COMPLETE THE	E APPROPRIATE SECTION*
CORPORATION* The Bidder is a corporation, has a corporate seal and the full names of its officers ar		
President		
Secretary		
Vice President		
Treasurer		
contracts for the company b	y action of its Board of Directout previous sentence if not app	s title) is authorized to sign construction proposals and ors taken on, 20 a certified copy of licable. This section must be completed if President or Vice
PARTNERSHIP* T	he Bidder is a partnership o	consisting of individual partners whose full names are:
INDIVIDUAL*		The Bidder is an individual whose full name is:
		CORPORATIONS ONLY – Secretary or Assistant Secretary attest and affix corporate Seal:
Print Name o	f Legal Entity	
Ву:		Circle one: Secretary or Assistant Secretary
Print name and title of sig	natory	State of Incorporation
	Address and tel	 lephone number
Subscribe and sworn to n	ne this day of	, 20
Notary Public  My Commission Expires:	(Seal)	

# **CONTRACTOR'S AFFIDAVIT OF ORGANIZATION AND AUTHORITY**

# NON-COLLUSION AFFIDAVIT FOR CONTRACTOR'S

STAT	E OF			
COU	NTY OF			
	being first duly sworn,			
depo	ses and says that:			
(1)	He/She is the:			
(')	He/She is the:  Owner, Partner, President, Vice President or other officer with evidence of authority attached			
	of			
	the Bidder that has submitted the attached BID;			
(2)	He/She is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;			
(3)	Such BID is genuine and is not a collusive or sham Bid;			
(4)	Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, have in any way colluded, conspired; connived or agreed, directly or indirectly, with any other Bidder, firm, or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted; or to refrain from bidding in connection with such Contract; or have in any manner, directly or indirectly, sought by agreement or collusion, or communication, or conference with any Bidder, firm, or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit, or cost elements of the Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the proposed Contract;			
(5)	The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the Bidder or any other of its agents, representatives, owners, employees or parties in interest, including this affidavit.			
BY:	CORPORATIONS ONLY			
ITS:	Title Secretary or Assistant, attest & affix corporate seal			
Subs	cribed and sworn to before me this day of , 20			
5420				
	My commission expires:			
Notar	y Public (SEAL)			

# NON-COLLUSION AFFIDAVIT FOR SUBCONTRACTOR(S) (DUE WITHIN 5 DAYS OF THE BID OPENING)

STATE	)F			
COUNTY	OF	_		
			b	eing first duly sworn,
deposes	and says that:			
(1) He/SI referr	ne ised to as the "Subcontractor";	of		, hereinafter
	e is fully informed respecting the itted by the Subcontractor to			
	<u> </u>	, the C	contractor for certain	n work in connection
Contr	ne act pertaining to the Project in unty, and State);			(City
(3) Such	Subcontractor's Proposal is gen	nuine and is not a	a collusive or sham բ	oroposal;
emplo conni or sha conne agree Contr Contr agree	er the Subcontractor nor any objects or parties in interest, included or agreed, directly or indirectly am Proposal in connection with action with such Contract, or has ment or connivance with any otherwise Proposal, or to fix any overactor's Proposal, or to secure ment any advantage against the erson interested in the proposed	cluding this affia ly with any other such Contract o s in any manner ther Bidder, firm verhead, profit or through collus e	nt, has in any way Bidder, firm or perso or to refrain from substitution, directly or indirectly or person to fix the cost element of the ion, conspiracy con	colluded, conspired, in to submit a collusive omitting a Proposal in by, sought by unlawful price or prices in said price or prices in said nnivance or unlawful
by an	rice or prices quoted in the Subco y collusion, conspiracy, connivar agents, representatives, owners,	nce or unlawfuİ a	greement on the pa	rt of the Bidder or any
			Т	ïtle
Subscribe	ed and sworn to before me this	day of _		, 20
	My commi	ission expires: _		_
Notary P	ublic			
(Seal)				

# **EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION**

During the performance of this Contract the Contractor agrees as follows:

- a. The Contractor will not discriminate against any employee or applicant because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to race, color, religion, sex, or national origin. Such action shall include but not be limited to the following: employment, upgrading, demotion, or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of the nondiscrimination clause.
- b. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- c. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other Contract understanding, a notice; to be provided, advising the labor union or worker's representative of the Contractor's commitments under the Equal Employment Opportunity Section of this Contract, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- d. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of such rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Owner Contracts,
- e. The Contractor will include the provisions of this section in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Owner so that such provisions will be binding upon each Subcontractor or vendor.

(Complete this section for signatures by a CORI	PORAT	ION):
(CORPORATE SEAL)		
ATTEST:		Corporate Name
	BY:	
Secretary* or Assistant Secretary*		President* or Vice President*
*choose one		
(Complete this section for signatures by PARTN	IERSHI	P and INDIVIDUAL):
WITNESS:		
	BY:	(Seal)
(ACKNOWLEDGEMENT OF THE ABOVE SIG	NATUF	RE MUST BE NOTARIZED USING THE
FORM ON THE FO	$\mathcal{L}$	ING PAGE)



# ACKNOWLEDGEMENT FOR EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

Corporate A	Acknowledgement	
(Use this portion of the form for acknowledge	ement of signature by a Corpo	ration):
STATE OF	<u> </u>	
COUNTY OF		
I, the undersigned notary public, do hereby of personally appeared before me this day and Secretary* of	acknowledged that he/she is S	Secretary* or Assistant
a corporation, and that by authority duly give instrument was signed in its name by its <i>Pre</i> seal, and attested by himself as its <i>Secretary</i> *choose one	ren and as the act of the corp esident* or Vice President*, se	poration, the foregoing
WITNESS my hand and notarial seal this	day of	, 20
My commission expires (SEAL)	Notary	Public
Individual or Partn	ership Acknowledgement	
(Use this portion of the form for acknowledge	ement of signature by a partne	rship or an individual.)
NORTH CAROLINACOUNTY	(Enter correct State a than shown.) Y	nd County if different
I, the undersigned Notary Public, do hereby opersonally appeared before me this day and instrument.		tion of the foregoing
WITNESS my hand and notarial seal this	day of	, 20
My commission expires:	Notary Pub	 blic (SEAL)

## MINORITY BUSINESS PARTICIPATION

#### Provide with the Bid:

Under GS 143-128.2(c) the undersigned Bidder shall identify on its Bid Proposal the minority businesses that it will use on the Project and the total dollar value of the bid that will be performed by the minority businesses and list the good faith efforts (Affidavit A) made to solicit participation. A Contractor that performs all of the Work with its own workforce may submit an Affidavit B to that effect in lieu of Affidavit A required above.

# After the Bid opening:

Orange Water and Sewer Authority will consider all bids and alternates, and determine the lowest responsible, responsive Bidder. Upon notification of being the apparent low Bidder, the Bidder shall then file within 72 hours of the notification of being the apparent lowest Bidder, the following:

An **Affidavit C** that includes a description of the portion of Work to be executed by minority businesses, expressed as a percentage of the total Contract Price, which is equal to or more than the 10% goal established. This affidavit shall give rise to the presumption that the Bidder has made the required good faith effort; or **Affidavit D** of its good faith effort to meet the goal. The document must include evidence of all good faith efforts that were implemented, including any advertisements, solicitations and other specific actions demonstrating recruitment and selection of minority businesses for participation in the contract.

#### These forms are included herein:

- (1) Identification of Minority Business Participation
- (2) Affidavit A Listing of the Good Faith Effort
- (3) Affidavit B Intent to Perform Contract with Own Workforce
- (4) Affidavit C Portion of Work to be Performed by Minority Firms
- (5) Affidavit D Good Faith Efforts

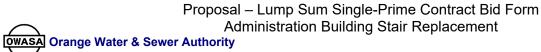
Identification of Minority Business Participation				
I,				
Firm Name, Address and Phone # Category	Work type	*Minority		

<sup>\*</sup>Minority categories: Black, African American (**B**), Hispanic (**H**), Asian American (**A**) American Indian (**I**), Female (**F**) Socially and Economically Disadvantaged (**D**)



The total value of minority business contracting will be (\$)_	

	ate of North Carolina AFFIDAVIT A – Listing of the Good Faith Efforts	
	unty of	
	davit of(Name of Bidde ave made a good faith effort to comply under the following areas checked:	<u>r)</u>
	dders must earn <u>at least 50 points</u> from the good faith efforts listed for their bio	d
	be considered <u>responsive</u> (NC Administrative Code 01 NCAC 30I .0102)	
		d
	<b>2 – (10 pts)</b> Making the construction plans, specifications and requirements available for review by prospective minority businesses, or providing these documents to them at least 10 days before the bid or proposals are due.	
	<b>3 – (15 pts)</b> Breaking down or combining elements of work into economically feasible units to facilitate minority participation.	
	<b>4 – (10 pts)</b> Working with minority trade, community, or contractor organizations identified by the Office for Historically Underutilized Businesses and included in the bid documents that provide assistance in recruitment of minority businesses.	
	<b>5 – (10 pts)</b> Attending any prebid meetings scheduled by the public owner.	
	<b>6 – (20 pts)</b> Providing assistance in getting required bonding or insurance or providing alternatives to bonding or insurance for subcontractors.	g
	<b>7 – (15 pts)</b> Negotiating in good faith with interested minority businesses and not rejecting them as unqualified without sound reasons based on their capabilities. Any rejection of a minority business based on lack of qualification should have the reasons documented in writing.	
	<b>8 – (25 pts)</b> Providing assistance to an otherwise qualified minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required. Assisting minority businesses in obtaining the same unit pricing with the bidder's suppliers in order to help minority businesses in establishing credit.	J
	<b>9 – (20 pts)</b> Negotiating joint venture and partnership arrangements with minority businesses in order to increase opportunities for minority business participation on a public construction or repair project when possible.	
	<b>10 – (20 pts)</b> Providing quick pay agreements and policies to enable minority contractors and suppliers to meet cash-flow demands.	
of I Sul	e undersigned, if apparent low bidder, will enter into a formal agreement with the firms listed in the Identificatio Minority Business Participation schedule conditional upon scope of contract to be executed with the OWNEF ostitution of contractors must be in accordance with GS 143-128.2(d). Failure to abide by this statutory provisio constitute a breach of the contract.	₹.
	e undersigned hereby certifies that he or she has read the terms of the minority business commitment and horized to bind the BIDDER to the commitment herein set forth.	is
Dat	te:Name of Authorized Officer:	_
	Signature:	
	State of North Carolina, County of	
	SEAL Subscribed and sworn to before me this day of 20	
	Notary PublicMy commission expires	



# **AFFIDAVIT B – Intent to Perform Contract with Own Workforce**

County of		
Affidavit of		
	(Name of Bidder)	
I hereby certify that it	t is our intent to perform 100% of the work required for the	
	(Name of Project)	
of this type project, ar	cation, the Bidder states that the Bidder does not customarily sund normally performs and has the capability to perform and will project with his/her own current work forces; and	
The Bidder agrees to support of the above	o provide any additional information or documentation requeste statement.	ed by the Owner in
	reby certifies that he or she has read this certification and is autiments herein contained.	thorized to bind the
Date:	Name of Authorized Officer:	
	Signature:	
	Title:	
SEAL	State of North Carolina, County of day of Notary Public	
	My commission expires	

AFFIDAVIT C – Portion of the Work to be Performed by Minority Firms  County of					
******* (NOTE: T	************* (NOTE: THIS FORM IS <u>NOT</u> TO BE SUBMITTED WITH THE BID PROPOSAL) *********				
to or greater than 10 This affidavit shall be	If the portion of the Work to be executed by minority businesses as defined in G. S. 143-128.2(g) is <b>equal to or greater than 10%</b> of the Bidders Total Contract Price, then the Bidder must complete this affidavit. This affidavit shall be provided by the apparent lowest responsible, responsive Bidder within <b>72 hours</b> after notification of being low Bidder.				
Affidavit of(Name	of Bidder)		I do her	eby certify that on the	
enterprises. Minority	um of% of the to businesses will be employ	otal dollar a yed as const	ruction subcontractors,	vendors, suppliers or	
providers of profession	onal services. Such work			g firms listed below.	
Name and Phone N		*Minority Category		Dollar Value	
		Category			
*Minority categories: Black, African American ( <b>B</b> ), Hispanic ( <b>H</b> ), Asian American ( <b>A</b> ) American Indian ( <b>I</b> ), Female ( <b>F</b> ) Socially and Economically Disadvantaged ( <b>D</b> )					
for work listed in this	3-128.2(d), the undersigne schedule conditional upor constitute a breach of the	n execution o			
The undersigned hereby certifies that he or she has read the terms of this commitment and is authorized to bind the Bidder to the commitment herein set forth.					
Date:	Name of Authorized Office	er:			
	Signatur	e:			
	Title	e:			
	State of North Carolina, Co				
SEAL	Subscribed and sworn to be				
	My commission expires				

CIP NO.: <u>280-20</u> PROJECT: <u>Administration Building Stair Replacement</u>
DATE: August 16, 2024
AFFIDAVIT D – Good Faith Efforts
County of
********* (NOTE: THIS FORM IS <u>NOT</u> TO BE SUBMITTED WITH THE BID PROPOSAL) *********
If the goal of 10% participation by minority business <u>is not</u> achieved, the Bidder shall provide the following documentation to the Owner of his good faith efforts:
Affidavit of:
(Name of Bidder)
I do certify the attached documentation as true and accurate representation of my good faith efforts.  (Attach additional sheets if required)

Name and Phone Number	*Minority Category	Work description	Dollar Value

<sup>\*</sup>Minority categories: Black, African American (**B**), Hispanic (**H**), Asian American (**A**) American, Indian (**I**), Female (**F**) Socially and Economically Disadvantaged (**D**)

Documentation of the Bidder's good faith efforts to meet the goals set forth in these provisions. Examples of documentation include, but are not limited to, the following evidence:

- A. Copies of solicitations for quotes to at least three (3) minority business firms from the source list provided by the State for each subcontract to be let under this contract (if 3 or more firms are shown on the source list). Each solicitation shall contain a specific description of the work to be subcontracted, location where bid documents can be reviewed, representative of the Prime Bidder to contact, and location, date and time when quotes must be received.
- B. Copies of quotes or responses received from each firm responding to the solicitation.
- C. A telephone log of follow-up calls to each firm sent a solicitation.
- D. For subcontracts where a minority business firm is not considered the lowest responsible sub-bidder, copies of quotes received from all firms submitting quotes for that particular subcontract.
- E. Documentation of any contacts or correspondence to minority business, community, or contractor organizations in an attempt to meet the goal.
- F. Copy of pre-bid roster.
- G. Letter documenting efforts to provide assistance in obtaining required bonding or insurance for minority business.
- H. Letter detailing reasons for rejection of minority business due to lack of qualification.
- I. Letter documenting proposed assistance offered to minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letter of credit, including waiving credit that is ordinarily required.

CIP NO.: <u>280-20</u>

PROJECT: Administration Building Stair Replacement

DATE: August 16, 2024

# **AFFIDAVIT D – Good Faith Efforts (continued)**

Failure to provide the documentation as listed in these provisions may result in rejection of the bid and award to the next lowest responsible and responsive bidder.

Date:_	Name of Authorized Officer:	
	Signature:	
	Title:	
	State of North Carolina, County of day of	20
,	Notary Public	
	My commission expires	

-END OF DOCUMENT-